Project Title: Climate Smart Bio - Waste Management Challenge Project/ Award Number: 00123636 Project/Output number 00118839 Implementing Partner: UNDP CO Serbia (DIM)

End Date: 31 December 2021 Start Date: 15 December 2019

#### LPAC Meeting date: 02 December 2019

#### **Brief Description**

The purpose of this project is to promote innovative projects and business solutions for climate-smart management of biodegradable waste (bio-waste).

The expected result of the Project is a smaller quantity of biowaste disposed on landfills that leads to the reduction of greenhouse gases emission and consequently reduction of environmental pollution (through the reduced contamination of soil, air and waters). In addition, this result is expected to contribute to the extension of the landfills lifetime.

Therefore, the United Nations Development Programme (UNDP), in partnership with the Swedish International Development Agency (Sida) and in close cooperation with the Ministry of Environmental Protection (MoEP), will initiate a Challenge based call for proposals of the business solutions and innovative projects that can contribute to creative ways of reduction, reuse and recycling of bio-waste in the Republic of Serbia, while at the same time preventing landfilling and reducing greenhouse gasses emissions. The Challenge call approach will be applied for active engagement of local self-governments, public utility companies, business sector, research and scientific community and food and non-alcoholic beverage industry to come up with new and innovative project proposals on how to practically respond to the Challenge and to jointly develop, finance and implement these project proposals further.

In this way, Project will assist the Government of the Republic of Serbia to divert a bio-waste fraction of communal waste from landfilling and boost local economies and businesses that are based on sustainable and circular solutions. It can represent significant potential for the creation of new circular economy business markets. The solutions sourced through the Challenge call are expected to generate multi-benefits in terms of environment, social and local economic development. Finally, the Project will contribute substantially to the achievement of targets for reducing the volume of biodegradables ending up at the landfills. Besides investments into creative solutions for reduction, collection and treatment of bio-waste, which is expected to be achieved through the Challenge Call, this Project will support further implementation of policies on improved bio-waste management. The first step is related to the development of the Communication plan in order to properly include all relevant stakeholders in discussions on different important topics relevant to the sound management of bio-waste.

Significant efforts will be invested in transferring the lessons learned and knowledge generated throughout the project implementation to enable benefits for the wider group of stakeholders. Also, the Project is expected to raise the interest of the waste generators and operators in creating their own sustainable waste management models based on replication and amendments of the Bio-waste Challenge Call.

Contributing Outcome: UNDAF/CPD (2016-2020) Outcome 8: By 2020, there are improved capacities to combat climate change and manage natural resources and communities are more resilient to the effects natural and man-made disasters UNDP Strategic Plan 2018-2021 Outcome 2: Accelerate structural transformations for sustainable development

Indicative Output(s) with gender marker: GEN11

Total resources 516,160.47 USD required<sup>1</sup>: 516,160.47 USD Total resources UNDP TRAC allocated: 516,160.47 USD (4.950,495.05 SEK as per Donor (Sida): UN operational exchange rate for December 2019)2 0 Government In-Kind: 0 0 Unfunded:

Agreed by (UNDP):

Francine Pickup Resident Representative Date: 106/12/2019

<sup>&</sup>lt;sup>1</sup> The Gender Marker measures how much a project invests in gender equality and women's empowerment. Select one for each output: GEN3 (Gender equality as a principle objective); GEN2 (Gender equality as a significant objective); GEN1 (Limited contribution to gender equality); GEN0 (No contribution to gender quality) <sup>2</sup> Note: Total allocated funds are 5 000 0000EV (setured to 40 UNDO to Note: Total allocated funds are 5,000,000SEK (reduced by 1% UNRC levy), which is calculated per UNORE for December 2019.

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### LIST OF ACRONYMS

CSUD	Climate Smart Urban Development
DSIP	Directive Specific Implementation Plans
EAS	Environmental Approximation Strategy
EISP	Environmental infrastructure Support Project
GEF	Global Environment Facility
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IED	Industrial Emission Directive
IPA	Instrument for pre-accession assistance
LSG	Local self-government
M&E	Monitoring and Evaluation
MAFWM	Ministry of Agriculture, Forestry and Water Management
MoEP	Ministry of Environmental Protection
MRV	Monitoring, Reporting and Verification
NGO	Non-Governmental Organization
SC	Steering committee
PBP	Performance based payments
PSU	Project Support Unit
PUC	Public Utility Company
R&D	Research and Development institutions
RWMC	Regional Waste Management Center
SEPA	Serbian Agency for Environmental Protection
t	Tons
QPR	Quarterly Progress Report
SCTM	Standing Conference of Towns and Municipalities
SDG	Sustainable Development Goals
SIDA	Swedish International Development Agency
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WWTP	Waste Water Treatment Plant

### I. DEVELOPMENT CHALLENGE

#### Situation analyses

The Republic of Serbia is in the process of finalization of negotiation position related to the Chapter 27: Environment and Climate Change, the largest of the 35 negotiation Chapters in terms of the volume of legislative acts. This sector needs significant resources and investments in the following areas: further transposition of the EU's environmental legislation into national legislation; putting in place the administrative capacity to implement, monitor and enforce legislation and establishing the infrastructure required to comply with the legislation. One of the most demanding sub-sectors in this regard is **waste management**.

Significant resources and investments are needed to achieve full compliance with the EU acquis and complete negotiations in this area, although there is a good level of alignment with the acquis and there are ongoing efforts to improve the enforcement of legislation in the waste management sector. The main principle underlying the legislation is the reduction of waste that ends up being disposed to the landfills through the application of a waste management hierarchy: Prevention; Preparation for Reuse; Recycling; Recovery operations (notably energy recovery) and Disposal. In this regard, there are restrictions on the amount of biodegradable waste that can be disposed at the landfill in a given timeframe, with the final target being a reduction in the amount of landfilled biodegradable waste of at least 65% compared to 1995 levels. The legislation thus leads towards the increase of costs of landfilling and, instead, provides an incentive for applying more environmentally sound means of managing waste in accordance with the waste hierarchy.

One of the preconditions to achieve implementation of such ambitious legislative framework, would be to have good quality infrastructure projects, advanced technologies and business models available. These can than bring best-value-for money investments to improve waste management schemes at the community level in Serbia. However, there is a general lack of markets for such investments to happen. Often those that can offer creative, innovative and cost-effective solutions, such as companies, innovators or scientific/research community, do not have an opportunity to meet with the potential beneficiaries, such as municipalities.

EU Progress Report 2019<sup>3</sup> recognizes a good level of alignment with the acquis in the waste management field for the Republic of Serbia but stresses that implementation is at an early stage. The share of recycled waste in the overall waste management has remained at a low level. According to the EU progress report, increased efforts are needed to close non-compliant landfills more rapidly and to invest in waste reduction, separation and recycling.

All development plans and public policy documents in the process of Serbia's EU accession are also reflecting the Agenda 2030. Sustainable Development Goals (SDGs) are also strongly being embedded in the continuously evolving EU policy and legislative framework. Investment into waste management sector, particularly in bio-waste separate collection and its treatment, which will also result in the reduction of environmental pollution, will contribute to the achievement of several SDGs, including the following: No poverty, Good health, Sustainable Consumption and Production, Gender equality, Climate Action, Life on Land, Sustainable cities and communities etc. Regarding the food-waste and food surpluses, as an integral part of the bio-waste management policy, it is important to note that in order to achieve SDGs targets such wastes need to be cut dramatically. Redistribution of edible food (SDG 2) from supermarkets, restaurants and homes is an obvious first step and the one that is thankfully gaining traction as a favourable option. Waste from the manufacturing of food can be fed to animals, and inedible leftovers can be converted into biogas and clean renewable energy (SDG 7).

According to Serbian Environmental Protection Agency (SEPA) report on waste management<sup>4</sup>, the total amount of **waste produced** in 2018 is 11,613,787 t out of which 11,519,280 t is a non-hazardous waste. The total amount of municipal waste generated in 2018 is 2,311,969 t (19,9%) which includes biodegradable kitchen and restaurant waste and waste from gardens and parks (including cemetery waste). Report on Municipal Solid Waste<sup>5</sup> includes analyses of morphological composition of waste for the Republic of Serbia, in which the organic waste fraction (gardening waste and other biodegradable waste) takes up to almost 50% in the mass of municipal waste, whereas the proportion of other biodegradable waste, with 30.96%, is approximately three times more than the gardening waste. Sources of biodegradable municipal waste are the following: garden and food waste, paper and cardboard and other biodegradable categories such are textiles, wood, leather, fine fraction etc. It also includes an amount of biodegradable waste that comes from the parks and public areas.

Average morphological composition of municipal solid waste in the period 2008-2009 is shown in the Graph below<sup>6</sup>.

<sup>&</sup>lt;sup>3</sup> https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/20190529-serbia-report.pdf

<sup>&</sup>lt;sup>4</sup> Waste Management in the Republic of Serbia in the period 2011-2018, SEPA (http://www.sepa.gov.rs/download/Otpad\_2011\_2018.pdf)

<sup>&</sup>lt;sup>5</sup> Report on Municipal Solid Waste Information (Bojan Batinić of the Faculty of Technical Sciences, Novi Sad for Ministry of Agriculture and Environmental Protection and the Environmental Infrastructure Support Programme, June 2014)

<sup>&</sup>lt;sup>6</sup> Identifying Waste Composition and Evaluation of Quantities with an Aim to Define the Strategy for Secondary Raw Materials Management within the Sustainable Growth of the Republic of Serbia (2008-2009). University of Novi Sad, Faculty of Technical Sciences, Department of Environmental Engineering



Graph 1. Morphological composition of municipal waste in Serbia - 2008

Beside municipal waste, around 38,647 t<sup>7</sup> (0,33%) of waste was generated by agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing. This waste category includes a significant amount of bio-waste.

According to the data of Statistical Office of the Republic of Serbia, published in 2019, the share of generated waste in the Republic of Serbia by sectors, in 2018 is presented below:



Graph 1. Generated waste in the Republic of Serbia by sectors in 2018

The manufacturing industry generated 1,436,348 t of waste in 2017, while in 2018 it generated 1,535,334 t, out of which 96.2% was non-hazardous and 3.8% was hazardous waste. This represents 3.1% of the total amount of waste produced out of which 1.5% is the biodegradable waste (organic).

The service sectors generated 369,789 t of waste in 2017; while 362,678 t was generated in 2018, out of which 96.0% is non-hazardous waste and 4.0% is hazardous waste. In 2018, the services sector generated 0.7% of the total amount of waste produced.

We assume that within the manufacturing industry, the largest amount of biodegradable waste is generated by the food industry, while the restaurants, caterers and retail premises are the largest generators of organic waste within the service sector.

Food processing is characterized by industrial processes which produce significant amounts of by-products that, according to the new EU regulation on waste, can be reused or recycled with favorable effects on the environment and an important impact on the economy. Each sub-sector is producing a different type of by-products that can be treated or re-utilized in different processes or industries.

According to preliminary data produced under IED project<sup>8</sup>, based on information gathered from 15 food processing sector operators (5 slaughterhouses and meat processing plants, 4 sugar refineries, 2 breweries, 3 edible oil

<sup>&</sup>lt;sup>7</sup> Waste management in the Republic of Serbia in the period 2011-2018, SEPA

<sup>&</sup>lt;sup>8</sup> Draft Report on generated by-products and current by-product management practices (2019) prepared under project "Further implementation of the Industrial Emissions Directive in Serbia"

production plants and 1 dairy) the most common waste of organic origin generated by the food industry is the following:

<u>Slaughterhouses and meat processing industry</u>: fats, waste sludge from WWTP, edible waste oil, feathers, offal (soft parts), animal manure, food residues from slaughterhouse kitchen, legs, heads, blood and inedible organs, poultry skins and emulsion from skins, mechanically separated meat and oil and grease.

<u>Sugar refineries</u>: beet fragments (leaves, tails and roots), pressed beet pulp, saturation sludge, dried pelleted beet pulp and molasses.

<u>Breweries, edible oil processing, dairy sector</u>: technical lecithin, waste edible oil, the ash from burning sunflower husk, sludge from wastewater treatment, waste bleaching earth and waste ash from sunflower shell.

Based on data from Statistical Office of the Republic of Serbia<sup>9</sup>, the most significant generators of biodegradable waste are presented in the table below.

Sector	Biodegradable waste (tonnes) generated in 2018
Manufacturing industry	23,271
Service activities	11,109
Agriculture, forestry and fishing	8,437
Water supply and wastewater management	258
Construction	3

In the document "Model for the management of biodegradable waste from commercial facilities<sup>10</sup>" data has been processed based on measurements performed in Novi Sad in the period between the year 2017 and 2018. Presented data shows that the share of biodegradable waste generated by cafés and restaurants is 23.2% while the hotels generated 35.3% of biodegradable waste in the total amount of generated waste.

The **collection coverage** for municipal solid waste currently includes only about 87.2% of the Serbian population according to the Report of the Serbian Environmental Protection Agency. Organized waste collection is provided mainly in urban areas, with significantly less coverage in rural areas. The collection of municipal waste in the Republic of Serbia is performed mainly by Public Utility Companies (PUCs) while in some municipalities, local self-governments (LSGs) entrusted waste collection to the private companies. Local authorities and waste operators, in general, suffer from a lack of or obsolescent waste collection infrastructure. This represents another challenge towards the development of circular economy markets based on waste reuse and recycling.

**Source separation** exists only in a small number of municipalities generating very small quantities of recyclable or recoverable material. Centers for separate collection of waste exist in Belgrade, Čačak and sporadically in other LSGs in the Republic of Serbia (Leskovac, Novi Sad), where municipal waste is collected in separate containers intended for collection of different types of waste (e.g. metal, glass, paper, PET).

Data from the Statistical Office of the Republic of Serbia shows that a total of 48.9 million tons of **waste was treated** in 2018 (out of which 68.6% is non-hazardous waste that was treated):

- 135,328 t is used as fuel for energy production
- 1,507,740 t was recycled
- ✤ 437,897 t used for coverage
- ✤ 46,662,638 t used for disposal on the land.

According to data submitted to SEPA by 331 operators which have a permit for waste reuse 2,03 million tons of waste was treated (metals and wastes from thermal processes, paper and cardboard packaging) in 2018.

Even though municipal waste contains a high degree of organic components, biological treatment of municipal waste is on the low level. In Serbia, there are no official statistics related to biodegradable waste treatment and there is no continuing research in this area. Existing data are the result of scientific research of the faculty and researchers who are working on a case- by-case basis.

At the local level, biodegradable waste is under the competency of either PUCs for waste management or green areas management or both. In some of the municipalities, there are concrete projects and initiatives on the treatment of biodegradable waste. However, there is still <u>no systemic approach</u> to this particular waste stream.

For example, the PUC "Gradsko zelenilo" Belgrade is in charge for green waste collection and treatment. They intend to collect green bio-waste from all Belgrade municipalities for the purpose of composting.

Composting plant of 500 t compost per year is being built in Čačak municipality and a composting pilot project is underway. Also, composting started in Sremska Mitrovica, financially supported by the GIZ. Under the project "Waste management in the context of climate change" financed by the GIZ, composting plants will be built in

<sup>&</sup>lt;sup>9</sup> Generated and treated waste, 2018

<sup>&</sup>lt;sup>10</sup> Lidija Tomas, ph.D.Thesis, 2018

Vrbas, Kruševac and Lapovo municipalities. Additionally, home composting will be introduced as a pilot project in Kikinda municipality under the GIZ regional project "Business models for improving waste collection and valuation".

In cooperation with an Austrian partner, company Desanio Ltd is constructing the composting plant in the city of Šabac. It will spread over 2.4 ha and will produce bio compost - peat for nurseries. Waste sludge from the wastewater treatment plant will be used as the main raw material and all materials suitable for the production of active bio compost will be used as the secondary feedstock. The planned annual production is 10,000 t of bio compost. Public Utility Company "Mediana", City of Nis, initiated the construction of biodegradable waste treatment facility.

The new Waste Management Strategy for the Republic of Serbia will recommend more systematic approach related to biodegradable waste treatment.

The quantities of non-hazardous **waste disposed** in 2018 was 1,7 million tons<sup>11</sup>. A significant amount of landfilled non-hazardous waste (822,000 t or 48% of disposed waste) is waste that includes mixed municipal waste, street cleaning residues and bulky waste, waste from slag processing from soil, soil and stone, mixed construction and demolition waste and mixtures or single fractions of concrete, bricks, tiles and ceramics. Out of the total disposed waste in 2018, 439.642 t has been disposed on 8 regional landfills and 2 municipal landfills that are operating in line with the EU regulations. The rest amount of waste (app. 70%) has been disposed on non-sanitary landfills (dumpsites). The reason should be sought in charging a fee for the disposal of waste to sanitary landfills. Despite that, if translated into monetary units, the Republic of Serbia is losing in average 50 million EUR annually in valuable recyclables that are not being recovered from disposed wastes.

Improper waste disposal has a vast environmental impact that leads to pollution of surface and groundwater, soil and air, caused by uncontrolled burning of dumpsites and waste in containers, contributing also to GHG emissions and land degradation. bio-waste also has an important function in producing compost which enhances the quality of the soil and can replace peat and artificial fertilisers. Energy recovered in the form of biogas or thermal energy can help in mitigating climate change.

As defined in the Waste Framework Directive (Directive 2008/98 of the European Parliament and of the Council of 19 November 2008), bio-waste as a part of "biodegradable waste" includes:

- Garden and park waste
- Food and kitchen waste from households, restaurants, caterers, retail premises and comparable waste from food processing plants.

Bio-waste does not include forestry or agricultural residue and, thus, should not be confused with the wider term "biodegradable waste" as defined in the Landfill Directive (Council Directive 1999/31/EC of 26 April 1999), which also covers other biodegradable materials such as wood, paper, cardboard, sewage sludge, and natural textiles.

From a climate perspective, targeting food and green waste reduction has the most significant impact than any other solid waste component due to its large share in total generated waste and a significant impact on the environment. When food and green waste ends up on a landfill, it decomposes in an oxygen-free environment, which produces carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>), a potent GHG that is far more devastating to the climate in the short term. The management of bio-waste touches on several policy fields, not only climate change but sustainable management of resources, energy, biodiversity, habitat protection, agriculture and soil protection. It is also an integral segment of sustainable food production, fight against poverty, hunger and social integration (in particular referring to the integration of vulnerable groups into formal waste management services, such as Roma population). Bio-waste is generated in large scales and thus is widely available and rather inexpensive. For this reason, it is being used as a resource for the production of a variety of products that carry certain commercial value. Which option provides the greatest environmental benefit is likely to depend on social and economic factors as well as on local circumstances, including whether an area is urban or rural. In any case, it represents a huge potential for the creation of new businesses by adding new values to this particular waste stream.

The Bio-waste Challenge project is expected to create the market for innovative, cost-effective solutions (technologies, business models) and supporting mechanisms for effective bio-waste management. It will also ensure that the most advanced, and best-value-for money solutions receive a technical assistance through the project-based accelerator, as well as to qualify for the financial support for their implementation. Compared to traditional ways of procurement through the public calls, the project will apply the Innovation Challenge approach that provides more flexible ways of sourcing innovative solutions for specific problems identified through the challenge. Instead of predefining the specificities of a certain solution, the challenge call remains open for vast number of possible solutions that can differ in the approaches, technologies, business models, stakeholders, engaged etc. The project and its Challenge Call will provide an enabling environment for variety of stakeholders,

<sup>&</sup>lt;sup>11</sup> Serbian Environmental Protection Agency, data published in 2019

including in particular the private investor, to interreact, cooperate, earn profit on innovation, but also it gives them an opportunity to contribute to national targets and goals of the Country. Rather than defining the detailed technical and other solutions upfront, however, it seeks to actively engage cities and municipalities, CSOs, public and business communities to come up with new and innovative ideas on how to contribute to this in practice and to jointly develop, finance and implement these ideas further.

The project builds on the United Nations Development Programme (UNDP) experience in implementing the Climate Smart Urban Development Challenge project. The established procedures of defining and organizing challenge call, as well as evaluation of the innovative ideas and projects, will ensure independent process based on criteria defined at the beginning of the project implementation. Considering the importance of the involvement of the private sector in attaining national targets and taking into account the sustainability benefits that can be achieved though the blending of finance, the Low-value Performance Based Payment (PBP) agreement was identified as the most convenient modality for co-financing the implementation of most advanced solutions of the Challenge Call. The Low-value PBP agreement can be used in cases where co-financing for supporting implementation is \$300,000 or less, to ensure results are achieved and to mitigate financial risk. All stakeholders, except individuals, can propose innovative projects related to climate smart bio-waste management. Moreover, this type of agreement tends to be used for development challenges that are "large and proven", which means the theory of change is well understood. In the case where a private sector entity is considered as a responsible party for a PBP, the selection process must include due diligence.

#### Strategic framework

One of the recommendations from the Environmental Approximation Strategy (EAS) for the Republic of Serbia is that current National Waste Management Strategy for the period 2010-2019 (Official Gazette of RS, No. 29/10), should take into consideration optimisation of measures and instruments to reduce the amount of waste. This, in particular, refers to biodegradable waste that can be easily diverted from being landfilled, including a combined strategy entailing home composting in rural areas, separate collection of biodegradable waste and composting of biodegradable waste in central composting plants in large cities. Also, one of the most critical measures defined by the EAS is related to investments in measures to support rural and suburban domestic composting schemes (diversion of biodegradable waste from the municipal waste stream).

National Waste Management Strategy (2010-2019), the main policy document governing sustainable waste management, is under revision through the Twinning Project "Support to Waste Management Policy" for the period 2019-2025.

Due to high percentage of organic waste in the mass of municipal waste, one of the key objectives of the existing, as well as the new draft Waste Management Strategy, is a reduction of the quantities of biodegradable waste in disposed municipal waste. The strategy envisages the establishment of regional waste management centers where the waste will be disposed at the landfill in each region. Therefore, diversion of biodegradable waste from landfilling will be a major challenge.

Draft Waste Management Strategy (2019-2025) proposes measures for infrastructure related to bio-waste:

- Establishment of home composting for citizens in rural areas, counselling and support for interested citizens. Estimation is that until 2025 around 1,024,380 composting containers will be necessary to equip all households in all rural areas of the Country;
- Construction of composting facilities (lines), including processing machines, loaders and transport vehicles (green waste composting). Estimation is that 83 facilities will be needed until 2025.

Additionally, two planning documents are developed in order to provide framework for further investments that are needed for implementation of the *acquis* in the waste management field: The Directive Specific Implementation Plans for the Landfill Directive and the Directive Specific Implementation Plan for the Waste Framework Directive. According to the DSIP targets for the Waste Framework Directive, 50% of Municipal Solid Waste have to be recycled until the year 2035<sup>12</sup> while the DSIP for the Landfill Directive envisages following targets for the amount of landfilled biodegradable municipal waste:

- by 31 December 2025, the share of biodegradable municipal waste disposed of in landfills will be reduced to 75% of the total amount (by weight) of biodegradable municipal waste produced in 2008;
- by 31 December 2029, the share of biodegradable municipal waste disposed of in landfills will be reduced to 50% of the total amount (by weight) of biodegradable municipal waste produced in 2008;
- by 31 December 2034, the share of biodegradable municipal waste disposed of in landfills will be reduced to 35% of the total amount (by weight) of biodegradable municipal waste produced in 2008.

<sup>&</sup>lt;sup>12</sup> Fiscal Council, Investment into environmental protection, 2018

The year 2008 is proposed as the reference year when 1,602,525 t of biodegradable waste was generated.

Current capacities for treatment and reuse of biodegradable waste at all levels (households, local and national) are not satisfactory when compared to the national goals, as well as to the experience and practice of the EU countries. The system for the separate collection of bio-waste is not developed at this point in Serbia.

Therefore, the Republic of Serbia must invest in the separation of biodegradable waste at the source and treatment of this fraction of municipal waste. It is important to strengthen the readiness of a systematic reform on biodegradable waste collection and treatment, including policy implementation, improving standards in the food industry and early involvement of the private sector to identify different solutions that can offer creative and cost effective solutions for treatment and recycling/reuse of the biodegradable waste.

Being the largest fraction of household waste, diverting biodegradable waste from landfill can significantly contribute to meeting recycling targets and, at the same time, reducing the burden on the environment. In particular, separation of the bio-waste fraction at the source could result in final products of good quality upon the treatment.

Increased recycling of bio-waste is expected to have positive impacts on employment. New jobs may be created in waste collection system and small composting plants. Separate household waste collection is less labour intensive than the collection of mixed household waste<sup>13</sup>. It is also likely that inhabitants of areas covered by separate collection will have to change their waste separation habits.

In parallel with revision of the Strategy for Waste Management, **the Draft National Waste Prevention Programme for the period 2020-2025** is in the final stage of preparation. Priority areas of this Programme, with high potential for waste prevention, are related to industrial, household and food waste since these wastes can cause major environmental problems and huge economic losses. In particular, the programme is identifying following measures: reducing generation of food waste in primary production, in processing and manufacturing industry, in retail sector, restaurants and food services, as well as in households, including measures that encourage food donation.

**Program for the introduction of cleaner production in the Republic of Serbia**, prepared by the project team that supports transposition of the Industrial Emissions Directive (IED) in Serbia, can be applied to processes, products and services in order to reduce risks to humans and the environment and to improve the efficiency of resource use. Particular attention is paid to the utilization of waste as a resource, with greater emphasis on prevention, reuse and recycling and the gradual abandonment of the concept of waste disposal at landfills. The Programme also contains the overview of the optimization measures, as well as the circular economy principles, that can be introduced in the food and beverage sectors.

The Republic of Serbia is in the process of preparation of the ex-ante impact assessment for **circular economy** which will determine the type of public policy document that is going to be prepared in the year 2020. The document will be in line with the EU Action Plan for the Circular Economy which defines a concrete and ambitious programme of action, with measures that stimulate transition towards a circular economy. Therefore, it is expected that measures will cover the whole cycle: from production and consumption to waste management. They will also contribute to generation of the market for secondary raw materials and the upgrade of the waste legislation.

Therefore, activities under this Project will focus on diverting bio-waste from landfilling and its reduction, reuse and recycling. Thus, the Project will contribute to the achievement of targets for reducing the volume of biodegradables ending up at the landfills and consequently reduce the emissions of greenhouse gasses and other environmental pollutants. In addition, it can represent significant potential for the creation of new circular economy business markets. Consequently, this Project will contribute to the implementation of priority policies of the Ministry of Environmental Protection (MoEP) in line with the draft Waste Management Strategy and in implementation of measures defined by the relevant Directive Specific Implementation Plans (DSIPs). The Project will also contribute to the implementation of programme and the Cleaner Production Programme. Moreover, it will initiate systematic reforms in bio-degradable waste collection and treatment, including policy implementation and the improvement of standards in the food industry.

<sup>&</sup>lt;sup>13</sup> Eunomia cited by COWI, 2004

### II. STRATEGY

Data analysis indicates a huge share of generated bio-waste in municipal waste as well as the lack of capacities for its separation at the source. Also, a large share of bio-waste is can be found in the commercial as well as industrial waste. Considering that huge amounts of these types of waste end up on landfills, significant investment in the field of industrial and commercial waste management is equally needed. This would increase incomes and generate economic benefits for the public and private companies, municipalities as well as for the overall society.

The key issue concerning the use of biodegradable waste is whether the waste is collected separately at the source. The best use of biodegradable waste will depend on several factors including the composition of the biodegradable waste, the level of contamination, the usefulness of the final product, level of emissions and how far the waste and/or the final product has to be transported.

Source separation of food waste and gardening waste is essential to ensure a clean input of bio-waste and gain the most environmental benefit. Whilst the bio-waste fraction can be extracted from mixed wastes, this is a labor intensive process and it results in a contaminated product. Contaminated or hazardous bio-waste should be treated separately. Paper and card should be collected separately and recycled. With that regard, priority should be given to such solutions that threat bio-waste before its disposal to sights where it is being mixed with other types of wastes. Also, the quality of other waste streams (dry recyclables) will be of much higher quality, which will result in an increase in their value.

Experience in countries with established bio-waste recycling shows that the first and preferred option for bio-waste recycling is compost production. Compost production is relatively easy and cost-effective to implement. Again, the quality of compost is higher if it is produced from green waste selected at the source, while the quality is lower if it is separated from mixed waste. It may also be used as a landfill cover. Every tone of bio-waste sent to biological treatment can deliver between 100-200 m<sup>3</sup> of biogas. Due to the energy recovery potential from biogas coupled with the soil improvement potential of residues (especially when treating separately collected bio-waste) it may often represent the environmentally and economically most beneficial treatment technique.

Regarding the other opportunities for re-consumption of bio-waste, once a composting and anaerobic digestion infrastructure has been established, this provides a solid basis of bio-waste management, to which novel technologies can be applied. Examples include biorefinery processes in which bio-waste serves as a source of bio-based chemicals, fibers and nutrients.

Experience of the EU countries indicates that the variation in the different types of industrial bio-waste, and their treatment solutions, is much larger than it is the case for municipal bio-waste. Industry can use the same infrastructure as the one for treatment of municipal bio-waste, whenever they are comparable in nature, composition and quantity. Also, it can be used as a secondary raw material, fertilisers or as soil improvers, in fodder or pet food production etc.

Taking into account needs and potentials of the Republic of Serbia regarding the bio-waste treatment, the United Nations Development Programme, in partnership with the Swedish International Development Agency (Sida) and in close cooperation with the Ministry of Environmental Protection, will initiate a Challenge based call for proposals for business solutions and innovative projects that offer creative ways to reduce, reuse and recycle bio-waste in the Republic of Serbia. The Challenge aims to reduce the disposal of such waste to the landfills and contribute to climate change mitigation.

Interested stakeholders can apply for one of the listed sub-challenges:

#### Sub-challenge 1

Food and kitchen waste (from households, restaurants, caterers, retail premises and comparable waste from food processing plants) (*municipal, commercial and industrial waste*)

#### Sub-challenge 2

#### Green waste from parks and gardens (municipal waste)

The project will apply already tested methodology for preparing, developing and launching the public calls in the form of "Innovation Challenges" and for the evaluation of innovative ideas and business models. The methodology has been tested within "Climate Smart Urban Development Challenge (CSUD)" project, funded by the GEF, aiming to identify and promote climate-smart solutions for mitigating climate change at the local level in the Republic of Serbia. This new Challenge Call for proposals will build on the previously gained experience and the established networks of innovators and experts. However, differently from the CSUD Innovation Challenge, this Bio-Waste Challenge will not result in delivering monetary Innovation Awards but will "award" the best-rated applicants with an

opportunity to benefit from technical assistance provided through the project-based Accelerator of project proposals.

This Project fits into the objective of the CSUD project which is to promote climate-smart urban development through various measures such as climate smart waste management (improved recycling schemes and waste to energy) and other measures contributing to climate change mitigation. Recalling the Letter on parallel co-funding, provided by Sida to the UNDP/GEF CSUD project, this particular project will contribute to the achievement of the same goals as defined by the CSUD project.

The Challenge Call aims to expand collaboration opportunities for Serbian companies with strategic partners (e.g. private sector, industry and R&D organizations) to create enabling environment for investments into separate collection and treatment of bio-waste fraction of municipal, commercial or industrial origin. With that regard, the Challenge call will encourage investments into any treatment option, including those that are particularly adapted to the specificities of the industrial bio-waste. In addition, any other initiative of private companies which leads to bio-waste reduction or reuse will be considered eligible for this particular challenge. Thus, the Challenge call will be open for all those entities that can offer appropriate innovative solutions, including local self-governments, public utility companies, business sector and industry, research and scientific community etc. The same approach will be applied for green waste from parks and gardens. The call will not be open for individuals.

The imperative will be that offered solutions correspond to the real needs and priorities of local communities and the Government of the Republic of Serbia. It will promote blending of funds of the private and public sector as well as with the other available sources of financing (such as bilateral assistance, loans, grants and innovative financing instruments which include grant - based crowdfunding, investment crowdfunding etc.).

The Challenge Call will be focused on sourcing innovative businesses and projects in bio-waste management sector. This Call will be encouraging innovative solutions regarding the collection and treatment of bio-waste through investment into composting or other alternative option for reuse and recycling, expected to be proposed by operators which have an adequate permit for waste treatment. Also, the Call will encourage investments into ideas and business cases proposed by the food industry related to reduction, treatment and/or reuse of its bio-waste generated during the production and/or processing.

It will also encourage solutions that are reducing the quantities of bio-waste at the source, as well as other reuse options such as heat production and power co-generation. The Innovation Challenge Call will also remain open for such solutions that can invent new products or find added value/new purpose for the bio-waste, applying the circular economy principles.

In particular, an integrated approach should be encouraged, where the bio-waste issue (collection and treatment) will be solved simultaneously through the development of a collection network and at the same time construction of a treatment facility.

In this way, Project will assist the Government of Serbia to take further reform initiatives in diverting a bio-waste fraction of communal and industrial waste from landfilling, increase their reuse and boost local economies and businesses that are based on sustainable and circular solutions. The solutions sourced through the Challenge Call are expected to generate multi-benefits in terms of environmental protection (such as through reduction of environmental pollution and GHG emissions) social and local economic development. Encouraging the separation of this fraction of waste and its treatment through the proposed projects should contribute to the achievement of the target of the Republic of Serbia related to biodegradable waste.

Also, successful implementation of project proposals supported through this Challenge Call will contribute to the UNDAF/CP outcomes considering that capacities to combat climate change and manage natural resources will be improved.

The Challenge Call for proposals will be prepared in consultations with the MoEP and other project partners. In order to contribute to reduction of bio-waste disposed to the landfills within Project implementation timeframe, attention will be given to the process of selection of applications that will be supported through this Project. Therefore, the following issues will be considered when selecting submitted applications and will be reflected in the eligibility/selection criteria as an integral part of the Challenge Call:

- \* the beneficiary has solved issues regarding property rights in case of construction works,
- the beneficiary has completed market research on the collection of raw materials (bio-waste) of appropriate quality for the proposed technology,
- innovative solution will be cost effective which means that beneficiary has identified the market for selling the products made from bio-waste and justifies the best value for money invested,
- the proposed solution contributes to the greenhouse gas emission reduction (valued against the quantities of GHG emissions reduced combined with the value of the investment).

Therefore, quality of submitted applications will be evaluated based on previously developed criteria under the GEF Climate Smart Urban Development Challenge project for each stage of the Challenge Call (selection of the best project proposals and selection of the most mature projects which will receive co-financing for implementation).

All selection criteria will be clear and unambiguous, meaning that they will be written in a way that the potential applicants can easily understand them. Selection criteria will be minimum, non-discriminatory requirements and will evaluate the applicants against their capacity to implement the project proposals.

The project will have two main sets of criteria:

1. Criteria for evaluation of the applications/project proposals (preceded by pre-selection/technical clearance of the project proposals that contain required documentation and meet the eligibility requirements)

2. Criteria for selection of mature projects for co-financing (including specific criteria defined under Low value Performance based payments agreement (PBP agreement)).

All information, including criteria, will be available as a part of the Guideline for Innovation Challenge Call for proposals.

The Project will use social media, partners' networks, hubs and clusters, innovation centres and media to reach the targeted stakeholders, potential beneficiaries of the Innovation Challenge Call. The procedure of application is presented below.

Review eligibility and evaluation criteria	Download the application form	Complete the application online	Submit

#### **Beneficiaries**

Special efforts will be made to keep all potential users/beneficiaries informed about the Challenge Call and to get broad and pro-active participation from stakeholders. In general, potential applicants are presented below.

In line with the Law on waste management of the Republic of Serbia, storage, transport, collection and treatment or disposal of waste can be done by PUCs in charge for waste management as well as private companies.

Additionally, the Law of waste management prescribes that **local self-government unit** shall ensure and provide equipment for centers for the collection of household waste which cannot be disposed in municipal waste containers (bulk waste, biodegradable waste, etc.), including hazardous household waste, per the local waste management plan. Accordingly, procurement of equipment and vehicles for separate collection of bio-waste as well as adequate technologies for composting plants are needed.

Therefore, the Challenge Call will enable local self-governments as well as **PUCs specialized for waste management** and/or **PUCs in charge of green public areas** to act as end beneficiaries. Also, the evaluation of compliance between the proposed activities related to bio-waste and the content of Local waste management plans of LSGs will have to be performed.

According to the data of Serbian Environmental Protection Agency (SEPA), the register of waste management permits issued at the end of July 2019 contains 2064 valid permits. Regarding permit related to non-hazardous waste, 799 operators have a permit for collection, 868 operators have a permit for transport, 952 operators have a permit for storage, 208 operators have a permit for treatment, and 39 operators have a permit for waste disposal.

When it comes to the treatment of plant-tissue waste, biodegradable waste (waste from gardens and parks), biodegradable kitchen and restaurant waste and waste from food industry, 69 **companies are licensed** to treat this type of waste out of which 7 operators are PUCs, and 1 is regional waste management company. Therefore, beside LSGs and PUCs, Challenge Call will also allow these companies to submit application.

In addition, the Law on waste management defines the liability of waste producers in Article 26. The waste producer may treat the waste individually or through an intermediary or another legal entity or entrepreneur performing the waste treatment or waste collection operations or through a public utility company or in the form of public-private partnership. Therefore, **bio-waste generators** will be potential applicants to the Challenge Call, taking into account that generated quantity of waste of plant origin in 2018 was 43.078 t<sup>14</sup>.

In particular, companies from the **food manufacturing industry and service activities** could be interested to solve the problems with bio-waste taking into account obligations arising from the Law on waste management as well as amounts of waste which they generate.

**Research Institutes** which have experience and already established good cooperation with public and private companies, could be partners in the Challenge Call for proposals, in the context of testing innovative solutions for recycling bio-waste and developing emerging technologies, in order to bring them to the market.

Upon evaluation of the applications, technical assistance will be provided to selected project proposals under the acceleration process. This support will enable successful applicants to develop their project proposals further and to reach "maturity" and get them ready for implementation.

Besides investments into innovative solutions for reduction, collection and treatment of bio-waste management, that is expected to be achieved through the Challenge Call, this Project will support broader policy and regulatory reforms in this field. During the implementation of the selected project proposals, weaknesses regarding the policy and regulatory framework that have an impact on their implementation will be identified quarterly. Particular attention will be paid on communication and coordination between local self-government units and line ministries on bio-waste management problems and plans, as well as the gaps in secondary legislation. The low level of public awareness regarding waste separation at the source, monitoring and reporting of generated waste quantities including self-monitoring and self-reporting of waste generators, economic instruments and incentives and financing system will also be subject of analyses and consideration for improvements.

Additionally, the Challenge for proposing a community - driven, innovative and cost-effective ideas in a bio-waste sector will lead to the reduction of GHG emissions, while simultaneously providing social, economic and environmental benefits for the community and its citizens.

Since this Project will also tackle environmental issues, its outcomes will be beneficial to all citizens' including marginalized and vulnerable population, having in mind that these groups often live in areas where solving environmental problems is one of the top priorities. Further improvements in environmental protection and management will assist in poverty reduction and increase the development potential.

The Project will promote engagement of young people, women and marginalized groups, which can, if successful, receive support to become entrepreneurs and develop and test their business ideas and projects. Moreover, applicants can have the opportunity to develop, test and demonstrate their products and increase their

<sup>&</sup>lt;sup>14</sup> Statistical office of RS, Statistical yearbook for 2018

commercialization opportunities. To reach out to different groups and their needs Communication plan will be developed.

Gender issues shall be actively mainstreamed throughout the Project within both target institutions/organizations and activities/outputs. Special criteria for beneficiary selection shall be developed to take into account different gender needs and help boost gender equality in local communities. Gender-sensitive indicators will also be formulated in such a way to allow measurement of the participation of women in all activities funded under this project.

All project stakeholders will be included in the identification of the weaknesses and problems in project implementation through periodic meetings. These meetings will also provide an opportunity to discuss problems and mitigation measures. Based on collected information, the project team will develop mitigation recommendations, including a description of necessary actions, identification of responsible institutions and the time for providing the response. Project progress reports will contain detailed information regarding the identified weaknesses and problems and how they have been addressed.

#### Partnerships, broader relations and communication

Throughout the implementation timeframe, the Project will seek synergies with other projects and activities within the area of biodegradable waste management, as further described under the Partnerships section. Proposed actions that could be implemented through the Project will be agreed with the Ministry of Environmental Protection. Being financed by Sweden, the project specifically will look for direct links and complementarity with other related Swedish funded development projects. Moreover, the project will also provide an opportunity for enhancing broader relations with Swedish expertise, including promotion related activities and business development, within the biodegradable waste sector. An important role of the project is to improve the awareness on bio-degradable waste management, how it links to climate change, and show concrete examples of how to take the lead in addressing it. Importantly, the project should seek to prepare and create readiness for larger systematic reform within this particular field.

## III. **RESULTS AND PARTNERSHIPS**

#### **Expected Results**

The purpose of this project is to promote innovative projects and business solutions for climate-smart management of bio-waste.

The expected result is to decrease the quantity of bio-waste disposed at landfills, thus resulting in a reduction of greenhouse gases emission, pollution of the environment and increase of the landfills lifetime.

Planned activities of the project under respective outputs are the follows:

#### Output 1: The Innovation Challenge Call for proposals for bio-waste conducted

#### 1.1 Preparation and launch of the Challenge Call for proposals

The Challenge Call for proposals will be prepared and published on the UNDP web site together with Application form and Guidelines for Applicants.

Guidelines for Applicants will contain detailed instructions on the application procedure and about the evaluation criteria. Special attention will be given to eligibility of applicants, eligibility of activities and costs as well as the deadline for submission of proposals. The Guidelines for Applicants also contain instructions on how to fill in the application form as well as dates for the "info days". Also, a clear set of criteria will be developed as a part of the Guidelines for Applicants: the Criteria for evaluation of the applications/project proposals.

Preparatory workshops are going to be organized before the Challenge Call is launched. Such workshops are going to be used for discussion of the expectations, needs and draft project ideas with potential beneficiaries. These interactive sessions will serve as validation workshops for checking whether the evaluation criteria are logical and realistic.

The Challenge Call for proposals and complete set of mandatory application documentation will be published on the UNDP project dedicated web site. Only applications submitted via on-line registration will be valid.

N.B. However, differently from the CSUD Innovation Challenge, this Bio-waste Challenge will not result in delivering monetary Innovation Awards but will "award" the best - rated applicants with an opportunity to benefit from technical assistance provided through the project-based Accelerator of project proposals.

#### **1.2** Organization of info-days to present Challenge Call for proposals

The Challenge Call for Proposals will be tentatively published in the first quarter of 2020 and will remain open for applications for at least 45 days. The Call will be followed by the appropriate media promotion and launching event. Applicants will be requested to fulfil the application form online and submit all accompanying documents by the given deadline.

Aiming to allow applicants to familiarise themselves with the contents and details of the Challenge Call and to enable them to prepare quality applications, information sessions (info-days) will be organized during the Challenge Call opening period. These events will be used to present details of the Challenge Call and to clarify application procedure, Application form, the deadline for submission of application, eligibility criteria and criteria for selection of applications/project proposals etc. Also, possible project ideas will be discussed with participants and the network of possible beneficiaries will be established.

Any presentation/documentation distributed on info-days will be published on the UNDP web site. In this way process of the establishment of an initial community of bio-waste innovators will start and will be used throughout the project for sharing of the information, knowledge and data, as well as for the purpose of replication and promotion of the project results.

Questions and Answers related to the preparation of the proposals and filling in the application forms will be ensured.

#### **1.3 Evaluation of the applications**

This activity is intended to assess and identify those applicants who are considered to be capable of executing the project proposal within a defined deadline based on the evaluation criteria.

Evaluation of applications will be performed by the Evaluation Committee comprised of the UNDP staff, MoEP representatives, the Waste Department and the Project Management Department respectively.

Quality of submitted applications will be evaluated through the two-stage process, based on previously developed criteria for each stage of the Challenge Call:

- pre-selection/technical clearance: selection of the project proposals that contain required documentation and meet the eligibility criteria
- evaluation: selection of the project proposals that are qualified for the project-based Accelerator (acceleration phase)

Once the Challenge Call is closed, the Evaluation Committee will perform an initial screening of the project proposals against the basic elements such as the eligibility, the completeness of project documentation and corresponding to the Challenge call topic. The first evaluation stage (technical evaluation) will result in pre-selected applications. At this point in the evaluation process, Sida will be asked for non-objection.

In the second evaluation stage, qualified pre-selected applications will go through detailed evaluation by Independent experts and assessment against the relevant evaluation criteria. The Independent Experts will submit evaluation reports to the Evaluation Committee. The pre-selected project proposals will be ranked based on the evaluation reports and associated scoring exercise. The Evaluation Committee will review the results before making the final recommendation on the selection of the project proposals.

Following the Evaluation Committee final decision, the successful Applicants will be notified about the positive decision on their applications and will be offered to take part in the project-based Accelerator of projects where they will receive appropriate technical assistance for further development of their project proposals.

# Output 2: New innovative technical and systemic solutions and business models contributing to reduction of bio-waste which is disposed on the landfills, successfully implemented

# 2.1 Establishing mentorship/coaching team and conducting acceleration to support further development of the selected project proposals towards the final selection for co-financing

In the acceleration period, selected project proposals will be further mentored towards mature project stage by mentorship/coaching team. This team will consist of individual experts who will be supervised by UNDP Portfolio Manager and will provide business advisory support, one-on-one mentoring, identification of potential markets, facilitate access to the market, assist in building partnerships, networking and promotion. Moreover, targeted training will be organized.

Composition of the mentorship/coaching team will depend on the specific topics of selected project proposals.

Mentorship/coaching team will develop detailed plan with specific targets for each project team that they need to achieve to qualify for co-financing implementation. The targets will be formulated with reference to the initial set of the Challenge Call criteria and specified criteria that each project needs to achieve in a given timeframe of the acceleration process.

Applicants will need to demonstrate the ability to deliver their project, by developed project documentation and financial construction.

In order to enable final decision, mentorship/coaching team will monitor progress related to the development of project proposals during the acceleration process. Progress and final reports prepared by the mentorship/coaching team will include information related to "maturity level" for all project proposal in the acceleration process.

Upon completion of the acceleration process, the Independent experts will be engaged to perform the final evaluation of the most successful projects that have passed through the acceleration process. The final evaluation will be done based on Criteria for selection of mature projects for co-financing (including criteria for Low-value Performance based payments agreement (PBP agreement)). The final evaluation process will rely on further elaborated and specifically quantified criteria for each of the projects participating in the acceleration process. This set of the final selection criteria will be developed and available to all participants of the Accelerator prior to the start of the Acceleration process. Upon evaluation process and based on the scoring results, up to 5 most advanced projects will be selected by the Steering committee for co-financing their implementation by applying the Low-Values Performance based Payment type of Agreements.

#### 2.2 Implementation of most advanced projects (through PBP agreements)

The implementation phase will last up to 12 months. This time limit will also be considered when evaluating and selecting the finalists.

In the implementation phase the selected applicants will have to implement activities as defined in individual project documents and their progress will be monitored. The focus of this phase is on achieving successful implementation and evidence of outcomes.

The mentorship/coaching team will provide technical assistance to selected applicants during the implementation of innovative projects. This will include proper monitoring of implementation progress with the purpose to keep the track of how the project is progressing in terms of expenditure, implementation of activities, delivery of the results and risk management.

Field visits will be organized, with the involvement of the mentorship/coaching team.

Co-financing for implementation will be ensured through the Performance-Based Payment type of Agreements (PBPAs) developed by UNDP as a new type of engagement with the private sector, among others that tie disbursements to a Responsible Party (RP) to the achievement of measurable results ("Result(s)") and related deliverables ("Deliverable(s)"). PBPAs provide greater incentives to Responsible Parties in exchange for greater accountability for achieving results.

# Output 3: Capacities and strategic communication related to bio waste management strengthened at all levels

# 3.1. Inception seminar organized to present project expected results and current status related to bio waste management

The primary goal of the seminar is to launch the project and enable stakeholders to gain a better understanding of the project objectives, design, outputs and outcomes and role of each project partners. The Inception seminar will also be an opportunity for stocktaking on issues such as positioning of the Republic of Serbia regarding the waste strategy, bio-waste management and related projects (i.e. examples from municipalities and companies) and on the focus and results of other similar development cooperation assistance projects. The seminar will also represent an opportunity to promote broader cooperation with Sweden in this particular field, including policy, research, promotion and business cooperation, among others.

Therefore, the following topics can be considered and promoted, as appropriate and as agreed by the Steering committee:

- EU accession process in the context of Chapter 27 (ENVAP project), Agenda 2030 with the focus on the importance of private partnerships collaboration and innovation
- The links between waste policy climate policy, circular economy policy, strategy for cleaner production and consumption and the status of development of policy reform and action on the ground within these areas
- Waste management policy in the Republic of Serbia (Strategy for waste management, DSIP for Landfill, DISP for Waste Framework Directive)
- Special presentation of past and current activities and projects related to biodegradable waste management
- EU -Swedish policy reform
   – achievements and challenges
- Swedish examples related to biodegradable waste management, including promotion and business, and for development cooperation projects, for example, EISP 2 and IED
- Presentation and discussion of Project activities and expected output
- Swedish examples related to biodegradable waste management.

#### 3.2. Development of Communication plan

To reach out to different stakeholder groups, the Communication plan will be developed at an early stage of the Project implementation since that adequate communication is a precondition for proper identification of interests and needs of different stakeholders and identification of gaps in the bio-waste management. A timely and appropriate Communication plan will avoid misunderstandings, enable the involvement of all relevant groups of stakeholders and encourage the preparation of project proposals.

Communication Plan will provide an overview of the communication objectives, target groups and communication messages and refers to a process of sharing information and knowledge. Besides stakeholders, this Communication plan will also facilitate communication with the general public.

This proactive approach will enable identification of policy and systematic reform needs in a comprehensive way which is essential for the successful implementation of activity 3.3 Supporting further policy implementation and project development on improved bio-waste management.

Proper and systematic communication will enable the MoEP to understand needs and recommendations for further policy implementation and systematic reforms in this area, including the concerns and needs of all stakeholders' groups, gaps in relationships between local and national level etc.

It will be an opportunity for the UNDP and Sida to identify needs in the Republic of Serbia and to discuss national strategic objectives related to bio-waste management and strategic objectives defined in the UNDP-Serbia country programme and Swedish donor programmes.

# 3.3. Supporting further policy implementation and project development on improved bio-waste management

In consultations with the MoEP and based on results of Communication plan and identified gaps during the implementation of selected project proposals, technical assistance will be provided to enable further development of biodegradable waste management system in Serbia.

Also, finalization of the new Waste Management Strategy and introduction of national targets for recycling and the amount of landfilled biodegradable municipal waste will be of outmost importance for the identification of future needs.

In line with priorities defined by the MoEP and needs for complementarity to other projects and activities, policy and regulatory support actions will be considered, as appropriate and as agreed by the Steering committee. Namely, this topic will be at the agenda of the first Steering committee meeting aiming to specify activities which will be included under this Component.

# 3.4. Final seminars organized to disseminate information on the project results and replicate the successes stories

Up to three final project seminars will be arranged to highlight the achievements of the Project and to demonstrate to all stakeholders the successes and lessons learned. Also, it will provide recommendations for future policy reform and systematic policy approach activities, as well as guidance on replication and upscale of the most successful project proposals in the area of bio-waste management. Seminars will be organized for different target groups with appropriate content.

The final seminars will reflect on gender issues and inclusion of vulnerable people. The final seminars will also summarise and promote the experiences of broader cooperation with the Swedish partners with formulating the way forward on all aspects of relevance to this particular topic.

#### **Resources Required to Achieve the Expected Results**

**Inception seminar** will be organized at the beginning of Project implementation to present expected results of the Project, the current situation related to biowaste management in the Republic of Serbia and to inform stakeholders about the future Challenge call (see above 3.1). UNDP staff will be responsible for the organization of the seminar for around 70 participants. Partners will present their experience and relevant policy.

**Preparation of the documentation for the Challenge Call** for proposals will be done by UNDP staff based on previous experience gained through the UNDP/GEF CSUD project. However, criteria for selection of new innovative technical and systemic solutions and business models will be discussed with the MoEP representatives and other partners on the Project.

In order to analyse the possibilities and needs of potential beneficiaries and to validate selection criteria, **at least two preparatory workshops** will be organized at different locations by UNDP. Additionally, UNDP will rely on the active engagement of partners on the Project to discuss as many options as possible during preparatory workshops with potential applicants.

UNDP staff will be responsible for publishing the Challenge Call and wide dissemination of information. Also, UNDP will make sure that relevant Project brochures and printed material are produced.

Once the Challenge Call is launched, **4 information sessions** (info days) will be held in different waste management regions to attract t wider interest for the Challenge call. It is expected to have approximately 40 participants in each informative session (representatives of LSG, food and non-alcoholic beverage industry, waste operators which possess appropriate permit, wholesalers of goods, shops etc.). UNDP will ensure that partners on the Project and MoEP representatives play an active role in presenting specific topics relevant for preparation of project proposals.

As a member of the Evaluation Committee, the MoEP representatives will be involved in the evaluation and selection of the applications/project proposals together with the UNDP staff, in line with previously developed criteria.

The pre-selection process will also relay on the technical evaluation performed by **independent experts**, resulting in pre-selection of submitted applications. Independent experts (1 to 3 experts), depending on the complexity of the applications received to the Challenge Call will be engaged to carry out technical examination so that the Evaluation Committee can finalize the pre-selection process based on transparent expert judgement. In this way, the Evaluation Committee will be able to make an informed and transparent decision on pre-selection of the most qualified applications. Sida will not take part in the Evaluation Committee but will give a non-objection after the presentation of the pre - selected applications.

In the second stage of selection, excessive group of **independent experts** (at least two per each application/project proposal) will be engaged to perform a detailed evaluation of the pre-selected applications/project proposals. Upon this detailed expert evaluation, selected project proposals will become members of the project-based Accelerator.

The **mentorship/coaching team**, **consisting of individual consultants**, will be engaged to support acceleration and implementation of the selected applications under the supervision of UNDP staff. Upon completion of the acceleration process, the team of Independent experts will be established to evaluate the progress of the development of project proposals against the initial and specific Challenge Call criteria.

Project proposal selected for co-financing through the Challenge call will be closely monitored throughout their implementation (site visits, meetings, preparation of reports etc.) and the gathered information and lessons learnt analysed and documented by mentorship/coaching team.

Steering committee **members** will approve final documentation of the Challenge Call for proposals including selection criteria, make the final decision on the up to five top-ranked most advanced projects that will receive co-financing for their implementation and will be engaged to approve deliverables during implementation.

UNDP will engage the **team of consultants for supporting further policy implementation and project development** consists of several consultants in order to provide support to the possible analysis of policy and regulatory reforms related to the improvement of bio-waste management based on gaps identified during project implementation. Additionally, technical assistance activities will be specified in consultation with the MoEP, based on priority needs identified at the beginning of the Project through strategic communication approach, taking into account available budget. The profile of consultants and their working experience will be in line with the subject area for which the expert is mobilised.

UNDP will work on strategic communication, exploring different channels of communication, including UN, Sweden and Ministry communication platforms and strategies.

**Final seminars** (at least three) will be organized at different locations (outside Belgrade) to enable successful dissemination of information related to Project results and recommendations specific for the group of stakeholders in focus. UNDP will take care when organizing final seminars that all specific topics relevant for replication of project ideas as well as all successes stories are widely promoted.

#### Partnerships

Particular attention will be given to building synergy between this project and other complementary initiatives, business development and development projects. The project aims at contributing to enhanced dialogue and cooperation amongst stakeholders, as to strengthen a shared understanding of the status of policy and activities, as well as needs for further reform, and the potential and importance for private and public entities to take the lead for a change.

#### Ministry of Environmental Protection (MOEP)

MoEP is responsible for policy development, implementation and control in the waste management filed (including revision of Strategy for Waste Management) as well as other related policy areas such as climate change, circular economy, and chemical management. The Ministry is also the beneficiary of several projects mentioned in the text below. The MoEP has been involved in the development of the project and will be taking part in the Steering committee. Moreover, the MoEP will be involved in more specific activities such as evaluation of applications

received to the Challenge call and identification of activities related to policy and project development. This will ensure that selected project proposals and other Project activities are in line with the strategic objectives of the Government. Also, MoEP can support coordination with other EU projects related to this field and with other relevant donors' projects in order to ensure synergies and integration.

#### Sweden – Related development projects and broader cooperation

Sweden has a long experience of waste management, including bio-waste, and broad scale of activities and projects in Serbia and cooperation with the Serbian Government. This project will aim at interlinking activities with other development projects financed by Sweden, but also seek to develop a broader cooperation with Swedish expertise, including promotion related activities and business development within the bio-degradable waste sector. The project will though early dialogue develops and seek synergies with the other projects.

#### Development projects financed by Sweden

**ENVAP project:** The formal negotiations regarding Serbia's membership in the European Union started in January 2014. Serbia has successfully passed the Chapter 27 bilateral screening and, at the end of 2016, received an invitation to submit the Negotiating Position for the environment & climate change chapter. Bilateral support provided by the Swedish Environment Protection Agency through the ENVAP project's first phase, 2013-2016, has contributed significantly to the positive development of the preparation of the negotiation position for the Chapter 27 under the ENVAP 2 project 2016-2021. At this time the ENVAP project is supporting the Ministry for the submission of Negotiating Position for the Chapter 27, working on strategic communication on different issues, including waste, and working with the Serbian SEPA for developing monitoring and assessment of issues related to the Chapter 27.

**EISP 2 project:** The project has in its first and second phase supported the Ministry of Environmental Protection in policy and infrastructural development. For example, the Directive Specific Implementation Plan (DSIP) for the Landfill Directive was drafted, and other policy analysis of the waste sector has been conducted. Together with the EU IPA project SS4R (Source Separation in Four regions), EISP is developing waste separation plans and infrastructure in four waste regions, including 17 municipalities. During the coming years, the EISP project and IPA funds aim at establishing a waste separation system (for dry fractions), including bins and lorries, on a local level. This infrastructure for waste separation and treatment of bio-waste. For example, the Bio-waste Challenge call could contribute with positive practical examples that would be complementary to SS4R goals. Also, the EISP project communication and awareness raising activities could contribute to further acceleration of broader reforms on bio-waste management policy. Also, EISP 2 team will be engaged during preparatory workshops and info days to present relevant project activities and lessons learned, in particular, the activities under the SS4R project.

**IED project:** Collaboration with the project team of "Further Implementation of the Industrial Emissions Directive in Serbia" (IED project) will be established regarding sub-challenge 1 related to bio-waste with an industrial origin. IED project provides support to the Serbian Competent Authorities and operators in the implementation of the Industrial Emissions Directive by carrying out a comprehensive analysis of the measures that operators have to implement in order to achieve full compliance with IED requirements. The project currently develops Guidance on by-products originating from the food industry. The IED project team will be consulted related to the identification of participants for preparatory workshops/info days, as well as they will be invited to take part at these events to present Guidance on by-products and case studies related to the food industry. Also, in the acceleration process, the EID project team will be consulted in terms of consideration of alignment of relevant project proposals with the recommendations of the Guidance on by-products, as appropriate.

**Twinning project** on Support to Waste Management Policy: The goal of the project is to further improve the waste management policy in the Republic of Serbia, by completing the strategic and legislative documents in line with the EU Acquis. Sweden, through the Swedish Agency for Environmental Protection, is a partner to the project. The project also supports the development of the Waste Management Strategy.

The "Support to Serbian Municipalities on the Road to EU Accession: Enabling high-quality services, stakeholder dialogue and efficient local administration" project: The Program is aiming at supporting and further preparing Serbian municipalities for EU accession through improving conditions for high-quality services, enhancing dialogue with stakeholders and enabling more efficient local administrations, in accordance with the principles of good governance and gender equality. The four-year program is implemented by the Standing

Conference of Towns and Municipalities (SCTM) – National Association of Local Authorities in Serbia in partnership with the Swedish Association of Local Authorities and Regions (SALAR) and will come to an end in 2019. The program has supported the development of local waste management plan for Čajetina municipality. The established partnership dialogue and results of these projects could be relevant for the Climate Smart Bio-waste Challenge.

The Opportunities for EU Accession project: The overall objective of the project is to contribute to the inclusion of marginalized minority population and other vulnerable groups into the social and economic life of the country and reduction of poverty among targeted groups. The specific objective of the project is to provide Informal Waste Collectors (IWCs) with the special focus on Roma women, youth, and other vulnerable local population groups with improved access to the labor market. The project has a special focus on waste collectors and complements the process of the introduction of source separation systems in the targeted municipalities. This particular project is being implemented by the HELP organisation.

**Swedish Embassy activities on promotion and broader relations:** The Swedish Embassy is strongly focusing on activities related to the Agenda 2030, with particular promotional focus on food related activities, such as the "Food for tomorrow" project. This is a regional project covering the Western Balkans region and it aims to enhance the dialogue and concrete actions on different challenges related to food production and consumption. Activities under this project, for example, include the organization of Coockathon events, promoting reduction and smart use of bio-waste in cooking. The Embassy also has several activities that involve young people, such as a Belgrade Kids Hub activity involving children in sustainable food consumption and climate change. Within the area of bio-waste Swedish policy, academia and businesses are very active and progressive. In the project inception phase, the options for linking and developing concrete activities that bring in Swedish expertise, build and strengthen Swedish-Serbian business relations, will be identified and further elaborated.

#### Other related ongoing activities

The UNDP, acting as an implementing agency of the Global Environment Facility (GEF), is supporting the MoEP to implement the five-year "**Climate Smart Urban Development Challenge**" project. The objective of the project is to promote climate-smart urban development.

All activities and measures undertaken by the project will need to result in tangible GHG emissions reduction and are to be considered from the perspective of climate smart planning. Project provides assistance in the establishment of "Innovation Challenge Programme" with the goal to provide initial capital for relevant stakeholders (including public and private companies, municipalities, research-scientific institutions, civil society organizations, individuals) for initiation, development and testing of the most innovative project ideas, including the opportunity for further co-financing of the most successful solutions. Through the Incubator of innovative ideas, the project has provided technical assistance for the transformation of projects into fully-fledged projects that can be implemented in practice. Upon successful incubation phase, 5 most advanced projects (proposed by 4 private companies and one public company) have received co-financing for implementation in the form of Performance Based Payment Agreements. With the initial GEF seed grant funding of \$0,5 million, the project has successfully mobilized private sector investments in the amount of \$11 million that has the potential for reducing 0.5 million tons of CO2 eg during the lifetime of the investments. The Sida is acting as one of the project partners that has issued the Letter of parallel co-funding of the CSUD project, which indicates the interest of the Swedish Government to support complementary projects and activities in Serbia leading to the same ultimate goal in terms of GHG emissions reduction. The Bio-waste Challenge project will be based on established mechanism of implementation and will rely on the experience and lessons learned of the CSUD project and its mobilized partnerships and resources.

Due to a great potential of biomass from agriculture and forestry for energy generation in Serbia, the GIZ is implementing a programme "**Development of a Sustainable Bioenergy Market in Serbia**" (DKTI) with particular focus on the perspectives and challenges in the development of the Serbian bioenergy market. The objective of the Programme is to improve general conditions and to strengthen capacities which contribute to the sustainable use of bioenergy and establishment of the sustainable bioenergy market in Serbia. There are several opportunities for cooperation with this programme on the activities related to the promotion of sustainable use of bioenergy and the development of local sustainable structures for biomass supply.

The project "Towards Better Management of Food Waste in the Republic of Serbia" is implemented by GIZ in cooperation with NALED and company Eso Tron doo. The main objective of this project is the improvement of the framework conditions for the collection and recycling of food waste. State institutions participating in the existing system (the Ministry of Environmental Protection, the Ministry of Agriculture, Forestry and Water Management, the Serbian Environmental Protection Agency, the Veterinary Directorate and the Inspection Authorities) are receiving

support in order to improve existing procedures, raise their own capacities and to make the system more efficient in terms of full implementation of the existing and adoption of new regulation. The project envisages a comprehensive awareness-raising campaign for public and private entities on responsible food waste management and the education of republic and local inspectorates on this topic. In parallel with these processes, the selected local self-governments will pilot the system for collecting food waste, by setting up appropriate infrastructure in public institutions and businesses. Therefore, close collaboration with GIZ/NALED team will be established. In particular, the impact of secondary legislation linked to food waste management on sub-challenge 1 will be taken into consideration. Also, the GIZ/NALED team will be consulted regarding the identification of participants for preparatory workshop/"info days" and will be asked to contribute based on their project activities and lessons learned.

#### Projects on Circular economy and urban development

Considering that revised legislative framework on waste has entered into force in July 2018, setting clear targets for the reduction of waste and establishing an ambitious and credible long-term path for waste management and recycling, Serbia should prepare the appropriate public policy paper for the circular economy that will provide guidelines for action. Currently, **PLAC III project** is assisting the MoEP in the preparation of ex-ante impact assessment in the field of circular economy which is a precondition for preparation of public policy document. This assignment will strengthen the administrative capacities in the Group for the circular and green economy at the MoEP and other relevant stakeholders.

Since the completion of the public policy document is expected in 2020, the Project will establish close cooperation with representatives in charge of the document preparation, to exchange information, in particular on the needs identified through the Bio-waste Challenge Call. Also, relevant MoEP representatives and consultants engaged to develop public policy paper for the circular economy will be invited to take active roles in the events organized under the Bio-waste Challenge Project.

#### Other key stakeholders

The strong involvement of the local self-governments will be ensured through the **Standing Conference of Towns** and **Municipalities**. Their particular role will be to disseminate information on the Challenge Call as well as to support further replication of the selected solutions.

Cooperation with the **Chamber of Commerce** will be focused on further dissemination of project-related activities and results among interested companies in Serbia and for the promotion of partnerships with foreign companies in order to ensure the transfer of knowledge and best available technologies. Also, this partnership will further nurture the introduction of the circular economy concept in Serbian decision making and commercial sector. This process will be backed up by concrete examples from practice sourced through the Innovation Challenge calls.

Collaboration with **Serbian Environmental Protection Agency** (SEPA) will be established in order to obtain additional data related to waste operators and generators as well as biodegradable waste quantities.

The role of the UNDP Team is to ensure continuous dialogue between the various stakeholders.

#### **Risks and Assumptions**

#### Assumptions:

- Smooth and effective cooperation and interaction between all parties involved in the project
- > Sufficient support and commitment from the Ministry of Environmental Protection
- Interest of all stakeholders to be involved in biodegradable waste management and positive response of waste producers (households and businesses) to participate in source separation
- > General population willing to make certain changes in their waste management behaviour
- Sufficient quality of received project applications to the Challenge Call
- > Beneficiaries willing to provide co financing.

#### <u>Risks:</u>

#### Political risks

Lack of political will to effectively support Challenge call and further implementation of selected project proposals

#### Procedural risks

- > Lack of specific legislation on bio-waste
- Potential changes in the Law on Waste Management and/or other relevant legislation Operational risks
- > Lack of commitment of the stakeholders
- > Lack of quality of the project applications received to the Challenge Call
- > Ability of the Challenge Call beneficiary to provide competent staff for project implementation
- Possible delays in obtaining relevant approvals and permits from relevant institutions necessary for project implementation
- > Low quantity and quality of collected waste
- > Low price for products from biowaste treatment
- Inadequate and/or non-capacitated human resources within the core project team to successfully implement the project by adaptive management and support the mainstreaming of its results.

#### Stakeholder Engagement

In general, the main target groups are the following:

- Public Utility Companies (PUCs) and Regional Waste Management Centers (RWMC) responsible for waste collection, transport, separation and treatment
- > Private operators which have permits for collection and treatment of bio-waste
- Food and non-alcoholic beverage industry (particularly milk industry, sugar, vegetable processing, dairies, confectioners, beverage producers) to give additional value to organic waste generated during food processing
- > Organic waste generators in the commercial sector:
  - Hotels and other accommodation facilities (e.g. kindergartens, schools, nursing homes)
  - Food sales facilities
  - Shops
  - Wholesale of goods with a short shelf life
  - Health and social services sector
- Research and Development institutions such as universities, faculties, research institutes, innovation centres and other R&D institutions in Serbia working on knowledge transfer, innovative technologies and technical issues of interest to private companies.
- Other SMEs, but only with certified proof of collaboration with the authorized waste operators (with valid permits for collection and treatment of bio-waste);

In order to identify the potential beneficiaries of the project under-listed target groups, detailed and most updated information related to bio-waste generators and operators will be obtained from SEPA. Additionally, the state of play in the Republic of Serbia related to biodegradable waste management and target groups will be discussed with the MoEP and Project Partners. Inception seminar will be an opportunity to confirm identified target groups, their needs and to facilitate their engagement.

Other potentially affected groups are entire local self-governments in the Republic of Serbia.

#### Knowledge and communication

Within the project detailed Communication plan will be prepared. Visible communication approach will address the key issues for both stakeholders and the general public. The communication plan will include a public awareness campaign to inform the public on bio-waste management, highlighting economic and socio-economic benefits of project interventions.

Transfer of knowledge related to recycling targets and targets related to biodegradable waste disposal and the importance of the separation of biodegradable waste at source will be provided through printed material.

Project brochures will be prepared and disseminated at the Inception seminar, throughout project implementation and at the closing event to present project progress from initiation, throughout the acceleration process until project closure. Also, the innovations and solutions showing potential for replication will be promoted on closing event, web-based information sharing platforms and through the other supporting materials and actions in order to contribute to the awareness raising. Such promotion and knowledge sharing material will ensure understanding and greater interest of potential applicants, thematic stakeholders and wider community. Presentations and outreach material will be collected and uploaded on the UNDP website. Content will be regularly updated with other professional contents, strategies and directions connected to bio-waste management. Information published on the web site will facilitate contacts and establishment of new business and other partnerships. The project information and knowledge sharing platforms can also provide benefits to other stakeholders.

Involvement of Research and Development institutions into the project implementation process will ensure the proper exchange of know-how within the academic community. The participation of the Serbian Chamber of Commerce, as well as Standing Conference of Towns and Municipalities, will also ensure that project related information and outcomes are widely disseminated among the business community and LSGs, as primary beneficiaries.

The project will also provide inputs and guidance to support further policy implementation and project development on improved bio-waste management, in particular, based on lessons learned from the implementation of individual project proposals and business cases selected through the Challenge Call. Also, transfer of knowledge will be provided through the preparation of Final project report which will include "lessons learned" section and recommendations for future work.

#### Sustainability and Scaling Up

This Project will increase the capacities of national counterparts, at the national and local level, in particular through their involvement in project workshops and through the dissemination of project results and lessons learned, as well as by providing recommendations on policy improvements, among others. Also, coordination and communication between private and public operators, R&D institutions and industry will be improved, thus will inevitably raise their interest for continuous cooperation. Also, it is expected that Project will raise the interest of the other waste operators to create their model by replicating/adapting model implemented through this Challenge Call to their specific needs.

Social sustainability will be guaranteed by an increase of public awareness about the importance of source waste separation and its effects on the improvement of the quality of environment and life of citizens.

Once the benefits of the Challenge Call modalities and procedures are successfully demonstrated, the prospects for their further application are high.

This process can be further encouraged by the knowledge and experience gained by the government and the participating municipalities during the Project implementation, which will further enable the transfer of this knowledge and experience to the entire country. Moreover, a collaboration of the private sector with R&D institutions can lead to broadening of the market for innovations and best-value-for-money solutions. The project will also nurture close collaboration between the private and public sector which will lead to the sustainability of future solutions that can be based on public-private partnerships concept and blending of private and public capital.

The project will produce information sharing brochures that will contain important information and lessons learned on each of the selected and most successful projects/solutions for bio-waste management. These materials will be widely distributed via Chamber of Commerce, as well as the Standing Conference of Towns and Municipalities and will be used as a basis for further replication of success stories throughout private companies and municipalities.

All activities envisaged within the Project will contribute to waste sector reforms in line with the Government policy and Strategy for waste management and other related policy areas such as climate change and circular economy. Importantly for sustainability and scaling up, synergies and cooperation with other Sida funded institutional capacity building projects (e.g. SS4R and IED projects) will be sought for, as well as with the Swedish Embassy promotional and broader relations expansion activities, including broadening relations with the Swedish businesses.

# IV. PROJECT MANAGEMENT

#### **Cost Efficiency and Effectiveness**

UNDP, with support of the Swedish International Development Agency and in close cooperation with the Ministry of Environmental Protection, will initiate a Challenge based call for proposals of business solutions and innovative projects that offer creative ways to reduce, reuse and recycle bio-waste fraction of biodegradable waste in the Republic of Serbia. The Project will apply tested methodology for preparing, developing and launching public calls in the form of "Innovation Challenges" and evaluation of innovative projects.

This project will also be taking into consideration the existing waste management portfolio of national and local institutions, UNDP and all other stakeholders to ensure complementarity and continuity and at the same time avoiding overlapping.

Experience of partners which are complementary with subjected Project will be used as input for stakeholder analyses and development of Challenge Call for proposals. Therefore, complementarity with currently ongoing projects will, first and foremost, allow for better and easier establishment of cooperation which will effectively influence fewer financial investments.

Subcontracting costs will be limited to the lowest possible level whilst at the same time using the in-house knowledge of UNDP's project team. Respective subcontracting costs will be divided into three relevant categories:

- Rent of meeting venue (including conference equipment, lunches, water and coffee breaks), printing meetings materials (minimum 10 events Inception seminar, at least 2 preparatory workshops, info-days at 4 locations and final seminar at 3 locations).
- > Translation of project working materials
- > Design and printing of project visibility materials

Furthermore, the participation of many local-level authority representatives will call for the rent of venues big enough to host all those interested in this model of connectivity/cooperation. Important to note here is that all the subcontracting costs will be implemented through the open bidding procedure which will ensure the best value for money and transparency.

#### **Project Management**

UNDP will be responsible for the provision of substantive and operational inputs for efficient and effective implementation of the project activities.

The operational base of this Project will be UNDP office in Belgrade, Republic of Serbia. The Project will be using existing office space provided for UNDP projects within the Ministry of Environmental Protection.

In addition, some project activities will be implemented on different location of successful beneficiaries of the Challenge based call. Therefore, monitoring activities which will be performed by UNDP staff and mentorship/coaching team will require occasional visits to the places outside of the place of operational base.

#### Arrangements

The Project shall be subject exclusively to the internal and external auditing procedure provided for in the financial regulation, rules, policies and procedures of UNDP. Should the Audit Report of the Committee of Auditors of UNDP to its governing body contain observation relevant to the contributions, such information shall be available to the Donor.

#### Collaborative arrangements with related projects

The Project will closely liaise and collaborate with the partners mentioned above under Partnerships, with the aim to create synergies among the project interventions. All projects are implementing complementary activities that are jointly contributing to better waste management. Also, some partners and beneficiaries are the same for all the mentioned projects.

### V. RESULTS FRAMEWORK<sup>15</sup>

Intended Outcome as stated in the UNDAF/Country Programme Results and Resource Framework:

By 2020, there are improved capacities to combat climate change and manage natural resources and communities are more resilient to the effects of natural and man-made disasters.

Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:

By 2020, there are improved capacities to combat climate change and manage natural resources and communities are more resilient to the effects of natural and man-made disasters.

Applicable Output(s) from the UNDP Strategic Plan: 1.4.1 Solutions scaled up for sustainable management of natural resources, including sustainable commodities and green and inclusive value chains

Project title and Atlas Project Number:										
EXPECTED	OUTPUT INDICATORS <sup>16</sup>	DATA	BASE	LINE	TARGETS (by	frequency of da	ata collection)	DATA COLLECTION		
OUTPUTS		SOURCE	Value	Year	Year	Year	FINAL	METHODS & RISKS		
					1	2				
Output 1 The Innovation Challenge Call for proposals for bio- waste conducted	1.1. Challenge call for proposals launched	Project reports	0	2019	Challenge call for proposals published on UNDP web site	N/A	Challenge call for proposals published on UNDP web site	Collection method: Review/analysis of relevant reports Frequency: once Responsibility: UNDP staff Risks: Insufficient visibility of an open Challenge call		
	1.2. Number of new innovative technical and systemic solutions and/or business models contributing to reduction of bio-waste which is disposed on the landfills, submitted	Project reports	0	2019	At least 10 applications submitted	N/A	At least 10 applications submitted based on Challenge call	Collection method: Review/analysis of relevant reports Frequency: once, upon deadline for submission of applications Responsibility: UNDP staff and potential beneficiaries Risks: Low interest of stakeholders to response on Challenge Call for proposals		

<sup>&</sup>lt;sup>15</sup> UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

<sup>&</sup>lt;sup>16</sup> It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

	1.3. Number of new innovative technical and systemic solutions and/or business models contributing to reduction of bio-waste which is disposed on the landfills, selected for acceleration process	Project reports	0	2019	At least 5 project proposals selected for acceleration process	N/A	At least 5 project proposals supported through acceleration process	Collection method: Review/analysis of relevant reports Frequency: once, within deadline envisage for evaluation of project applications Responsibility: Evaluation committee Risks: Low quality of project applications
Output 2 New innovative technical and systemic solutions and business models contributing to reduction of bio-waste which is disposed on the landfills, successfully implemented	2.1 Number of new innovative technical and systemic solutions and/or business models contributing to reduction of bio-waste which is disposed on the landfills, selected for co-financing	Project reports Beneficiary reports	0	2019	0	Up to 5 applicants signed PBP agreement	Up to 5 project proposals implemented	Collection method: Review/analysis of relevant reports Frequency: monthly, within deadline envisage for final selection Responsibility: Evaluation committee, mentorship/coaching team Risks: Insufficient maturity of project proposals
	2.2. Number of direct and indirect beneficiaries affected by the Project	Beneficiary reports Project reports	0	2019	0	Direct: 1.000 Indirect: 5.000	Direct: 1.000 Indirect: 5.000	Collection method: Review/analysis of relevant reports Frequency: quarterly Responsibility: PBP agreement beneficiaries Risks: high quality application that targets a smaller number of direct and/or indirect beneficiaries
Output 3 Capacities and strategic communication related to bio waste management strengthened at all levels	3.1 Number of companies/institutions that participated on Inception seminar	Project reports	0	2019	At least 70	Ν/Α	At least 70	Collection method: Review/analysis of relevant reports, attendance lists Frequency: first quarter of Project Implementation Responsibility: UNDP staff Risks: Low interest of respective project beneficiaries in invitation for seminar received/passed by UNDP staff

3.2 Development of communication plan	Project reports	0	2019	Communication plan developed	N/A	Communicatio n plan implemented	Collection method: Review/analysis of relevant report Frequency: first quarter of Project Implementation Responsibility: UNDP staff and engaged experts Risks: Low commitment of stakeholders
3.3 Number of recommendation and policy/regulatory documents produced	Project reports	0	2019	N/A	At least 1 document	At least 1 document	Collection method: Review/analysis of relevant reports Frequency: annually Responsibility: UNDP staff, Team for supporting further policy implementation and project development Risks: Low commitment of MoEP and LSGs
3.3. Number of waste management regions which participated on Final seminar	Project reports	0	2019	N/A	At least 20 municipalities which belongs to different waste management regions	At least 20 municipalities which belongs to different waste management regions	Collection method: Review/analysis of relevant reports, attendance lists Frequency: last month of the Project Implementation Responsibility: UNDP staff Risks: Low interest of respective project beneficiaries in invitation for seminar received/passed by UNDP staff

# Project Outputs and Related Targets/Sub-targets

<b><u>Output 1</u></b> : The Innovation Challenge Call for proposals for bio-waste conducted	<b>Output 2:</b> New innovative technical and systemic solutions and business models contributing to reduction of bio-waste which is disposed on the landfills, successfully implemented	<b><u>Output 3</u>:</b> Capacities and strategic communication related to bio-waste management strengthened at all levels
Activity 1.1: Preparation and launch of the Challenge Call for proposals Challenge Call will be designed to target not only the municipal staff, research and academic institutions, industry and private sector but also the general public (including women and young people). Criteria for selection of applications will be carefully developed to minimize risks during implementation and to secure beneficiary financial contribution. At least two preparatory workshops will be organized to discuss the beneficiary's needs and project ideas. Deadline for submission of a proposal will be at least 45 days to enable quality of project proposals. Challenge call will be published on the UNDP website/portal.	Activity 2.1: Establishing mentorship/coaching team and conducting acceleration to support further development of the selected project proposals towards the final selection for co- financing Mentorship/coaching team of individual experts and network of research institutes and professionals that may provide technical assistance and share knowledge on the latest developments in the field of bio-waste management will be established, while also taking into account gender-related aspects. Coaching of the project proposals selected for the acceleration process in order to reach maturity and get them ready for implementation will result in the final selection. Monthly progress reports of teams will be developed by each consultant during an acceleration period and submitted to the Portfolio Manager for approval. Up to 5 applicants will sign PBP agreements.	Activity 3.1: Inception seminar organized to present project expected results and current status related to bio-waste management Inception seminar will be organized at the beginning of the Project for approximately 70 participants. The inception report will be prepared within 3 months from the commencement date. The report will include information related to the status of Challenge call for proposals and Communication plan development, Inception seminar and preparatory workshops.
Activity 1.2: Organization of info-days to present the Challenge Call for proposals Challenge call will be supported with related public outreach events and materials in order to explain expected results, criteria for selection, the procedure for submission of project proposals and deadlines. Info-days will be organized on at least 4 location to provide an opportunity to potential beneficiaries from different waste management regions to participate and inform about procedures and rules related to Challenge call. At least 10 project applications expected to be submitted. A progress report will include information related to results of the evaluation process and info –	<ul> <li>Activity 2.2: Implementation of most advanced projects (through PBP agreements)</li> <li>It is expected that up to 5 project proposals will be implemented to achieve the following targets:</li> <li>&gt; 1000 of direct beneficiaries affected by Project</li> <li>&gt; 5000 of indirect beneficiaries affected by Project</li> <li>&gt; 5000 of indirect beneficiaries affected by Project</li> <li>Quarterly reports will be developed to present activities planned and implemented, progress which is made and problems encountered including critical issues /risks.</li> </ul>	Activity 3.2: Development of Communication plan The communication plan will be developed at an early stage of the Project. Communication Plan will provide an overview of the communication objectives, target groups and communication messages and refers to a process of sharing information and knowledge. Besides project stakeholders, this communication plan will establish communication with the general public.

days.	
Activity 1.3: Evaluation of the applications Based on the agreed selection criteria, submitted applications/project proposals will be evaluated. Best scored project proposals will be selected for the acceleration process. The summary report related to the progress of selected teams will be prepared.	Activity       3.3:       Supporting further policy implementation and project development on improved bio-waste management         Based on of the Communication plan and weaknesses identified during implementation of an individual project proposal, the recommendation will be developed to support and/or facilitate further replication of the solutions sourced by the Challenge Call. Also, the preparation of other relevant documents will be agreed with MoEP, based on Steering committee consent. Recommendation and other deliverables will be presented to the public at Final seminars and will be a part of the Final report. Also, deliverables and data will
	part of the final report. Theo, derived and call with         be presented and regularly updated on UNDP web- portal.         Activity 3.4: Final seminars organized to disseminate information on the project results and replicate the successes         Final seminars aim to present results and lessons learnt of the Project and to encourage and facilitate replication of successful projects. Therefore, Final events will be organized on 3 different locations to ensure successful dissemination of Project results and success stories. The final report will include information related to all activities planned and implemented, the achievement of results, problems encountered, linkage with other projects, complementarity and sectoral coordination, overall conclusions on implementation, participation and ownership by beneficiaries and recommendations for

# Draft Project Implementation Plan

Project		Yea	ar 1		Year 2			
component	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1								
Activity 1.1 Preparation and launch of the Challenge Call for proposals	-							
Activity 1.2 Organization of info-days to present the Challenge Call for proposals								
Activity 1.3 Evaluation of the applications								
Output 2								
Activity 2.1 Establishing mentorship/coaching team and conducting acceleration to support further development of the selected project proposals towards the final selection for co-financing								
Activity 2.2 Implementation of most advanced projects (through PBP agreements)				-				
Output 3								
Activity 3.1 Inception seminar organized to present project expected results and current status related to bio waste management	-							
Activity 3.2 Development of the Communication plan								
<b>Activity 3.3</b> Supporting further policy implementation and project development on improved bio-waste management								
Activity 3.4 Final seminars organized to disseminate information on the project results and replicate the successes stories								

# VI. MONITORING AND EVALUATION

The project results as outlined in the project results framework will be monitored periodically during project implementation and evaluated at the Project completion to ensure the project effectively achieves these results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Based on the date of the first contribution and the activity period of the project, the operational completion date of the projects and terminal evaluation is set to 30<sup>th</sup> June 2022.

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans:

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Detailed M&E plan will be developed in the inception phase, defining who will collect data, how, and when. Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency require for each indicator.	Slower than expected progress will be addressed by project management.		
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.		
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project. Annual quality assessments will be conducted thereof	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.		
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the Steering committee and used to		

#### Monitoring Plan

			make course corrections.	
Project Report	A progress report will be presented to the Steering committee and key stakeholders, consisting of progress data showing the results achieved against pre-defined targets at the output level, the project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Inception report (3 months after commencement of the Project), 6 months reports, and at the end of the project (Final report)		
Project Review (Steering committee)	The project's governance mechanism (i.e., Steering committee) will hold regular project reviews to assess the performance of the project and review the Multi- Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Steering committee shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	Annually	Any quality concerns or slower than expected progress should be discussed by the Steering committee and management actions agreed to address the issues identified.	

#### **Evaluation Plan**<sup>17</sup>

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
Terminal evaluation		1.4.1 Solutions scaled up for sustainable management of natural resources, including sustainable commodities and green and inclusive value chains	By 2020, there are improved capacities to combat climate change and manage natural resources and communities are more resilient to the effects of natural and manmade disasters	30 June 2022	Relevant Ministries and national institutions	

<sup>&</sup>lt;sup>17</sup> Optional, if needed

# VII. MULTI-YEAR WORK PLAN 1819

All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the project need to be disclosed transparently in the project document.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		RESPONSIBLE	PLANNED BUDGET		
		Y1 (USD)	Y2 (USD)	PARTY	Funding Source	Budget Description	Amount (USD)
Output 1: The Innovation Challenge Call for proposals for	1.1 Preparation and launch of Challenge Call for proposals	7,500.00	0.00	UNDP	SIDA	71200 International Consultants	7,500.00
biodegradable waste conducted		10,000.00	0.00	UNDP	SIDA	71300 Local Consultants	10,000.00
Gender marker: GEN1	1.2 Organization of info-days to present Challenge Call for proposals	10,000.00	0.00	UNDP	SIDA	71400 Contractual services - Individuals	10,000.00
Gender marker. GENT		2,000.00	0.00	UNDP	SIDA	71600 Travel	2,000.00
		3,000.00	0.00	UNDP	SIDA	74200 Audio Visuals	3,000.00
	· · ·	1,000.00	0.00	UNDP	SIDA	74500 Miscellaneous	1,000.00
	1.3 Evaluation of the project applications	2,000.00	0.00	UNDP	SIDA	75700 Training services and workshops	2,000.00
	Sub-Total for Output 1	35,500.00	<b>0</b> .00				35,500.00
Output 2: New innovative technical and systemic solutions and business models contributing to reduction of bio-waste which is disposed on the landfills, successfully implemented	2.1 Establishing mentorship/coaching team and conducting acceleration to support further development of the selected project proposals	3,000.00	6,000.00	UNDP	SIDA	71200 International Consultants	9,000.00
		18,000.00	0.00	UNDP	SIDA	71300 Local Consultants	18,000.00
		0.00	10,044.58	UNDP	SIDA	71400 Contractual services Individuals	10,044.58
		0.00	5,000.00	UNDP	SIDA	71600 Travel	5,000.00
Gender marker: GEN1	2.2 Implementation of the most advanced projects	0.00	1,000.00	UNDP	SIDA	74200 Audio Visual	1,000.00
		1,000.00	1,000.00	UNDP	SIDA	74500 Miscellaneous	2,000.00
		1,000.00	1,000.00	UNDP	SIDA	75700 Training services and workshops	2,000.00

<sup>&</sup>lt;sup>18</sup> Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

<sup>&</sup>lt;sup>19</sup> Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the **Steering committee**. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

		102,000.00	215,000.00	UNDP	SIDA	72600 Grants	317,000.00
	Sub-Total for Output 2	125,000.00	239,044.58				364,044.58
Output 3: Capacity and communication related to bio waste management strengthened at all levels	3.1 Inception seminar organized to present project expected results and current status related to bio waste management	3,000.00	6,000.00	UNDP	SIDA	71200 International consultants	9,000.00
		9,000.00	9,000.00	UNDP	SIDA	71300 Local Consultants	18,000.00
Gender marker: GEN1		5,000.00	0.00	UNDP	SIDA	71600 Travel	5,000.00
Condor Marker. CENT		0.00	10,000.00	UNDP	SIDA	72100 Contract Companies	10,000.00
	3.2. Development of Communication plan	500.00	2,500.00	UNDP	SIDA	74100 Professional services	3,000.00
	3.3. Supporting further policy implementation and project development on improved bio waste management	2,000.00	1,000.00	UNDP	SIDA	74200 Audio Visuals	3,000.00
	3.4. Final seminar organized to disseminate information on the project results and replicate the successes	1,000.00	1,000.00	UNDP	SIDA	74500 Miscellaneous	2,000.00
		2,000.00	3,000.00	UNDP	SIDA	75700 Training services and workshops	5,000.00
	Sub-Total for Output 3	22,500.00	32,500.00				55,000.00
Evaluation	Evaluation	0.00	5,000.00	UNDP	SIDA	71300 Local Consultants	5,000.00
	Sub-Total for Evaluation	0.00	5,000.00				5,000.00
	Sub-total Programmable	183,000.00	276,544.58				459,544.58
Project management		9,190.89	9,190.89	UNDP	SIDA	64300 Staff	18,381.78
		19,117.055	19,117.055	UNDP	SIDA	75100 GMS	38,234.11
	Sub-Total	28,307.945	28,307.945		1		56,615.89
TOTAL		211,307.945	304,852.525	1			516.160.47

### VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

This project will be directly implemented by UNDP's Country Offices in the Republic of Serbia, in line with UNDP's Programme and Operations Policies and Procedures. UNDP Country Offices will act as the Executive and be responsible for overall management, backstopping and monitoring of the project as well as for management and delivery of assigned outputs, their proper monitoring and operational closure.



The Steering committee<sup>20</sup> is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendation for UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, Steering committee decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Committee, final decision shall rest with the UNDP Programme Officer and Project Manager.

The Steering committee will meet regularly (at least twice a year, tentatively January 2020, September 2020, January 2021, September 2021) to review project progress, discuss and agree on project multi-year work plans. The Steering committee key roles will be as follows:

- Provide overall leadership, guidance and direction in successful delivery of outputs and their contribution to outcomes under the programme;
- Be responsible for making strategic decisions by consensus, including the approval of substantive project changes (i.e. changes in the project document);
- > Approve the work plans, reviews and other reports as needed;
- > review the progress achieved, management risks, and other relevant issues;
- Address any relevant project issues as raised by the Project manager and authorise any deviation from agreed work plans;
- Provide guidance on new project risks and agree on possible countermeasures and management actions to address specific risks.
- Approval of each tranche of PBP agreements, pending the fulfilment of the milestones defined for each signatory of the PBP Agreements;

<sup>&</sup>lt;sup>20</sup> The Project Steering Committee in this ProDoc equals the function of the Project Board, as per the UNDP ProDoc nomenclature.
- Ensuring close co-operation among the institutions involved;  $\geq$
- $\triangleright$ Coordinating with other projects related to this field and with other relevant donors' projects to promote synergies and integration.

*Executive role* will be performed by the UNDP, who shall have a decisive power if the opinions of development partners and beneficiary representatives do no reach compromise.

Senior Supplier (Development Partners) role is to provide guidance regarding the technical feasibility of the project. This role will be held by a designated representative from the UNDP and SIDA. UNDP will ensure that at least \$20,000 of internal resources are dedicated to this particular project.

Senior Beneficiary role will be performed by representatives of Ministry for Environmental Protection, typically at decision making level, with the purpose of ensuring the realization of project benefits from the perspective of project beneficiaries.

The project will be managed by a *Project Manager/Coordinator*, who has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Committee. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results (outputs) specified in the project document to the required standard of quality and within the specified constraints of time and cost

Project Assurance is the responsibility of each Steering committee member; however, the role can be delegated. The Project Assurance role supports the Steering committee by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. Project Assurance has to be independent of the Steering committee; therefore, the Steering committee cannot delegate any of its assurance responsibilities to the Project manager. The project assurance role for this project will be performed by UNDP.

Project Implementation Unit (PIU) established by UNDP will be responsible for technical and administrative aspects of the implementation of this Project including support to development, monitoring and evaluation of the implementation of selected applications/project proposals on other and/or dislocated locations where the services are actually performed. However, the final responsibility for all the activities to be undertaken by (or on behalf of) the UNDP remains fully on Project Manager.

Project Support Unit (PSU) will comprises of the representatives of the line departments of the Ministry of Environmental Protection, namely the Department for Waste Management, the Department for Project Management and the Department for Climate Change. Main role of this unit is to ensure day-to-day support of the line Ministry to the project implementation. It will also ensure commitment of the MoEP and utilize project results to feed in the process of reforms and amendments of regulatory and strategic framework. Similar is done through the UNDP/GEF CSUD project that supports creation of enabling policy and financing environment in Serbia for boosting innovation in the climate change mitigation and resilience. In this way, the Bio-waste Challenge results will be added to the CSUD project outputs, contributing to the institutional, regulatory and financing reforms needed to sustain climate innovation policy in Serbia. Jointly, Bio-waste Challenge and the CSUD project will also support development of national and local circular economy enabling regulatory and financing environment.

Team of evaluators will consist of evaluators that will be engaged to support technical evaluation and pre selection of submitted applications. In evaluating applications against the Challenge Call criteria, the specialised technical knowledge, experience and sound judgement of the evaluators is crucial. Therefore, their engagement will be done based on the subjects of applications received to the Challenge Call. Also, Independent Evaluators will be engaged to perform detailed evaluation of pre-selected applications/project proposals and to prepare final evaluation report related to selection of applications for co-financing. Evaluators will be selected and supervised by the UNDP staff, in close consultations with Sida

and the MoEP.

Mentorship/Coaching team will be engaged based on the type of selected applications. Their profiles will depend on the specific areas that the selected project proposals are referring to. Their role would be to ensure efficient acceleration process and smooth implementation of selected project proposals. Team will be supervised by the Project manager.

Team for supporting further policy implementation and project development on improved bio-waste management will consist of senior experts which will be engaged to provide technical assistance. Their profiles will depend on topics which will be covered by activities identified and confirmed by the Steering committee at its first meeting. The team could also include experts involved in other related projects and activities, thus enhancing synergies and broadening cooperation. Team will be supervised by the Project manager.

# IX. LEGAL CONTEXT

### Option a.

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of (country) and UNDP, signed on (date). All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by UNDP ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

# X. **RISK MANAGEMENT**

## UNDP (DIM)

- 1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)
- 2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds]<sup>21</sup> [UNDP funds received pursuant to the Project Document]<sup>22</sup> are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/ag sanctions list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
- 3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).
- 4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
- 5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse ("SEA") and sexual harassment ("SH") allegations in accordance with its regulations, rules, policies and procedures.
- 6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
- 7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:
  - a. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of each responsible party,

<sup>&</sup>lt;sup>21</sup> To be used where UNDP is the Implementing Partner

<sup>&</sup>lt;sup>22</sup> To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:

- i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.
- b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.
- c. In the performance of the activities under this Project, UNDP as the Implementing Partner shall ensure, with respect to the activities of any of its responsible parties, sub-recipients and other entities engaged under the Project, either as contractors or subcontractors, their personnel and any individuals performing services for them, that those entities have in place adequate and proper procedures, processes and policies to prevent and/or address SEA and SH.
- d. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.
- e. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
- f. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and subrecipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
- g. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and subrecipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

h. UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud

or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

<u>Note</u>: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- i. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- j. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- k. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

# XI. ANNEXES

1. Project Quality Assurance Report (provided in the separate document)

# 2. Social and Environmental Screening Template

# **Project Information**

Project Information	
1. Project Title	Climate Smart Bio-Waste Management Challenge
2. Project Number	Project/Award number 00123636
	Project/Output number 00118839
3. Location (Global/Region/Country)	Republic of Serbia

# Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

### QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

#### Briefly describe in the space below how the Project mainstreams the human-rights based approach

Since the break-up of former Yugoslavia, Serbia has actively adhered to the principles of mainstreaming human rights in the national legislation and government policies. The country has ratified and participates in a number of international human rights conventions and protocols. Additionally, the country has adopted national strategies towards gender equality and against discrimination. The proposed project will further support this process and will mainstream through its design and activities a clearly defined human-rights based approach.

The project will support the implementation of open monitoring, information and knowledge management as well as broad community engagement and participation – starting from the preparation of the Challenge based call for proposal of business solutions and innovative projects for creative ways to reduce, reuse and recycle bio-waste in the Republic of Serbia aiming to reduce its disposal on landfills and mitigate climate change– through a highly participatory approach, thereby also seeking to improve the transparency and accountability of local governance, opportunities for public participation in decision making and development of people's living environment. In this way, the project will support the right to information and will aim to reflect the views of various stakeholders, including minorities and marginalized groups in the project design and operation. More efficient and environmentally friendly bio-waste management promoted under the project is expected to contribute to the further improvement of quality of life and the advancement of equal human rights to a safe and clean environment, while also creating new employment and business opportunities thus supporting the right for equal employment. Throughout the project implementation, specific emphasis will also be placed on gender related aspects and equal rights of men and women, as described in detail below.

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

Although legislation in Serbia favours gender equality and women's empowerment, there are still some social barriers preventing women's equal participation in the economy, social life and decision-making processes. The project will further support the improvement of gender equality related to climate change by taking a gender responsive approach to promote gender equality and women's empowerment in the design and execution of all project outputs.

To achieve this, the Project will, through involving UNDP gender focal point at the Preparation of Challenge based call for proposal stage fully

incorporate gender considerations into the project design.

Gender related aspects have already been and will continue to be taken into account by including gender specific indicators into the project results framework, collecting gender disaggregated data on the project impact during its implementation and specifically encouraging female innovators and experts to participate in the project implementation. Project activities will be implemented also by ensuring maximum consideration of gender responsiveness. Should at any point during the project implementation, the monitored data indicate that either one of the genders is significantly under-represented among the project beneficiaries, the reasons for that will be studied and depending on the findings, specific measures will be introduced by project's adaptive management to address and correct the situation.

Briefly describe in the space below how the Project mainstreams environmental sustainability

Mainstreaming environmental sustainability is in the core of project strategy. Among others, environmental sustainability will be achieved through introducing and providing various tools for environmentally sustainable management and operation of all Serbian municipalities, with a strong focus on improved bio-waste management practices.

Activities envisaged under this Project focus on environmental issues and climate change mitigation. Outputs of the Project seek to improve waste management in line with the EU requirements. Through the implementation of project proposals selected based on Challenge call it is expected that amount of bio-waste disposed on landfills will be reduced, thus will result in a reduction of greenhouse gases emission, reduce the environmental pressure on the air, soil and rivers. Also, separation of bio-waste at the source, their reduction or reuse will increase landfills life and particularly reduce the disposal of unsanitary landfills and dumpsites.

According to the data from SEPA, since 1982 the annual temperature in Serbia has started to increase and this trend is still continuing. The beginning of the period of rising air temperature is accompanied by a period of reduction of annual precipitation amounts. According to some of the worst case scenarios, estimates for Serbia are that by the end of this century, the annual air temperature will increase by as much as 4°C while a slight increase in rainfall can be expected in winter and a decrease in summer. Future climate conditions in Serbia also indicate more frequent and intensified weather extreme events (e.g. floods and droughts).

Therefore, it is expected that the Project will have a positive impact on climate change due to the reduction of GHG emissions. To confirm expectations, quantities of bio-waste which will be separately collected, reduced or reused will be monitored during Project implementation and will be notified in the project reports.

Supporting further policy implementation and project development on improved bio-waste management will directly contribute to environmental protection in line with Serbian and EU requirements and strengthen the capacities at all levels related to bio-waste management.

Part B. Identifying and	Managing Social and	Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Attachment 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low Risk Projects.	potential social and environmental risks? Note: Respond to Questions 4 and 5 below before proceeding to			QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
Risk Description	Probability (1-5)	Significance (Low, Moderate, High)	Comments	Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
Risk 1: The collection of recyclable materials from household waste in Serbia is often undertaken by informal waste collectors, mostly Roma people, which may face a risk of losing their income opportunities by the introduction of new waste management practices. Principle 1 (1.1 and 1.3)	P = 2	Low	While higher efficiency and formalization of the sector are essential for increasing the recycling rates, there is also a need to take care of the continuing income opportunities for the current informal waste collectors. This risk has a low probability of occurrence based on experience with biodegradable waste management activities in the region and globally. The impact is assessed as low, although this can be managed through appropriate project design.	A livelihoods analysis will be undertaken during the selection of proposal to identify groups that could be potentially economically affected by project activities (associated with informal/illegal waste collection). Those findings will inform the design of the project, and a Livelihood Action Plan will be developed, if necessary.
Risk 2: The implementation of the project may lead to concerns about the human rights of the affected marginalized social groups involved in waste collection, mainly Roma, and lead to potential conflicts. Principle 1 (1.7 and 1.8)	P=2	Moderate	As the project will involve a change in the waste management practices and could limit the supply of source of income of informal waste collectors, it may result in potential conflicts and raise concerns about human rights of the affected population. Similar cases have been observed in other projects related to waste management in the region.	proposals/applications. Particular attention will be given to the Roma population that is involved in the waste collection. This risk will be mitigated through Component 3. Capacity related to biowaste management strengthened at all levels of the project will support policy and regulatory reforms and provide recommendations and guidance on full integration of "illegal waste collectors" in the national social and employment policy.
Risk 3: The project may have adverse impact on gender equality.	I = 3	Moderate	Women, as well as children, are currently heavily engaged in waste	

	-		
Principle 2 (1.1 and 1.3)	that even implement of the even biowaste	practices. It is possible en after the project tation and "formalization" mployment of women in management, they can ated as a cheap source of	female innovators, entrepreneurs and experts to participate in the project implementation and gender action plan will lay out how this will be done in detail. Promotion activities and workshops will be gender mainstreamed, targeting specific needs and roles of women who are
Risk 4: The project may pose potential risk to the health and safety of the individuals involved in the waste management activities under the project. Principle 3, Standard 3 (3.9)	P = 2 risk is lo expected waste. H properly	ability of occurrence of this w as the project is not to deal with any harmful lowever, this should be monitored and managed e project implementation	designed as part of the Acceleration phase. The project will also produce Communication plan and promotion materials to support, in particular companies and individuals involved in biowaste treatment, as of how to undertake preventive measures to ensure occupational safety
	QUESTION 4: What is the overall Proje	ect risk categorization?	
	Select one (see <u>SESP</u> fo	• •	Comments
		Low Risk X	If the appropriate mitigation measures are put in place during the Project, the project will have a low risk over the short to medium term impacts.
		Moderate Risk 🗆	
		High Risk 🗆	
	QUESTION 5: Based on the ide categorization, what requirements of		
	Check all that a	oply	Comments
	Principle 1: Human Rights		The Project does not have direct impact on human rights.
	Principle 2: Gender Equality Empowerment	and Women's	The project does not have high gender marker.
	1. Biodiversity Conservation and Management		The project has no impact on Biodiversity Conservation and Natural Resource Management.
	2. Climate Change Mitigation and A	•	The project has positive impact on climate change mitigation.
	3. Community Health, Safety and W	orking Conditions	The Project will not have direct impact on Community Health, Safety and Working Conditions.
	4. Cultural Heritage		The project has no impact on cultural heritage.
	5. Displacement and Resettlement		The project will have no issues of displacement or resettlement.
	<ol> <li>Displacement and Resettlement</li> <li>Indigenous Peoples</li> </ol>		The project will have no issues of displacement or resettlement. The project has no impact on indigenous peoples.

# Final Sign Off

Signature	Date	Description			
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.			
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.			
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.			

Cne	cklist Potential Social and Environmental <u>Risks</u>						
Prin	ciples 1: Human Rights	Answer (Yes/No)					
1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?							
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? <sup>23</sup>	No					
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No					
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No					
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No					
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No					
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No					
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No					
Prin	ciple 2: Gender Equality and Women's Empowerment						
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No					
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No					
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No					
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?	No					
	For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being						
	ciple 3: Environmental Sustainability: Screening questions regarding environmental are encompassed by the specific Standard-related questions below						
01							
	dard 1: Biodiversity Conservation and Sustainable Natural Resource Management	K I					
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?	No					
	For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes						
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No					

<sup>&</sup>lt;sup>23</sup> Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water?	No
	For example, construction of dams, reservoirs, river basin developments, groundwater extraction	
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?	No
	For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if	
	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.	
Stan	similar developments in the same forested area are planned, then cumulative impacts	
	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.	No
2.1	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.         dard 2: Climate Change Mitigation and Adaptation         Will the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may	No
<b>Stan</b> 2.1 2.2 2.3	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.dard 2: Climate Change Mitigation and AdaptationWill the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?Would the potential outcomes of the Project be sensitive or vulnerable to potential	-
2.1 2.2	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.dard 2: Climate Change Mitigation and AdaptationWill the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive	No
2.1 2.2 2.3	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.dard 2: Climate Change Mitigation and AdaptationWill the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change,	No
2.1 2.2 2.3 Stan	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.dard 2: Climate Change Mitigation and AdaptationWill the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding	No
2.1 2.2 2.3 Stand	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.dard 2: Climate Change Mitigation and AdaptationWill the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically floodingdard 3: Community Health, Safety and Working ConditionsWould elements of Project construction, operation, or decommissioning pose potential	No
2.1 2.2 2.3	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.         dard 2: Climate Change Mitigation and Adaptation         Will the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?         Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?         Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?         For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding         dard 3: Community Health, Safety and Working Conditions         Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g.	No
2.1 2.2 2.3 <b>Stan</b> 3.1 3.2 3.3	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.         dard 2: Climate Change Mitigation and Adaptation         Will the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?         Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?         Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?         For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding         dard 3: Community Health, Safety and Working Conditions         Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?         Does the Project involve large-scale infrastructure development (e.g. dams, roads,	No No No
2.1 2.2 2.3 <b>Stan</b> 3.1 3.2	similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.         dard 2: Climate Change Mitigation and Adaptation         Will the proposed Project result in significant <sup>24</sup> greenhouse gas emissions or may exacerbate climate change?         Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?         Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?         For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding         dard 3: Community Health, Safety and Working Conditions         Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?         Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?         Would failure of structural elements of the Project pose risks to communities? (e.g.	No No No No

<sup>&</sup>lt;sup>24</sup> In regards to CO<sub>2</sub>, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Stan	dard 4: Cultural Heritage	
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Stan	dard 5: Displacement and Resettlement	
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? <sup>25</sup>	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Stan	dard 6: Indigenous Peoples	
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.	No
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No

<sup>&</sup>lt;sup>25</sup> Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
dard 7: Pollution Prevention and Resource Efficiency	
Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	No
Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?	No
For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol	
Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No
	peoples?         Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?         dard 7: Pollution Prevention and Resource Efficiency         Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?         Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?         Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?         For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol         Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?         Does the Project include activities that require significant consumption of raw materials,

# 3. Risk Analysis

No.	Description	Date identified	Туре	Probability & Impact	Countermeasures / Mitigation response	Owner	Submitted, updated by	Last Update	Status
1.	Lack of political will to effectively support Challenge call and further implementation of selected project proposals		Political	P = 3 I = 5	Identification of win-win opportunities not addressing biodegradable waste management, but challenges, on which there is a common agreement within the Ministry for Environmental Protection to be among the most pending ones. The final selection of the beneficiaries will be done on the basis of the demonstrated interest and commitment of the candidate to effectively participate in and contribute to project implementation.	Steering committee			
2.	Lack of commitment of the stakeholders and partner projects		Operational	P = 3 I = 3	Communication related to strategic objectives and national targets and importance of reduction of landfilling of biodegradable waste will be improved through meetings, workshops, seminars and info days.				
3.	Lack of quality of project applications		Operational	P = 3 I = 5	Careful preparation and design of the challenges, consultations and capacity building of the key stakeholders will be done prior to launching the Challenge call. UNDP will organize Inception seminar, preparatory workshops and info days in different waste management regions to present objectives of the Challenge Call and criteria for selection of proposals. Participants on these events will be carefully identified. Also, the deadline for submission of a proposal will be adequate to enable preparation of good quality proposals.				
4.	Ability of Challenge call beneficiary to provide competent staff for project implementation		Operational	P = 3 I = 4	Close co-operation through on-the-job mentoring will be UNDP approach during the period of acceleration and implementation of selected proposals in order to ensure smooth implementation of individual projects.				
5.	Possible delays in obtaining relevant approvals and permits from relevant institutions necessary for project implementation		Operational	P = 3 I = 5	implementation of the selected proposals will be identified on the	Project team Beneficiary			
6.	Low quantity and quality of collected waste		Operational	P = 3 I = 5	In order to avoid insufficient quantity and low quality of biodegradable waste, business plan and market research need to be performed before project implementation related to the collection of biodegradable waste. Therefore, special attention will be paid on design criteria for selection of proposal. Additionally, UNDP will engage mentorship/coaching team to identify and eliminate weaknesses during acceleration and	team			

No.	Description	Date identified	Туре	Probability & Impact	Countermeasures / Mitigation response	Owner	Submitted, updated by	Last Update	Status
					implementation period.				
7.	Low price for products from bio waste treatment		Operational	P = 3 I = 5	In order to achieve cost effective solution, business plan and market research to be performed before project implementation related to the usage of products after treatment. Therefore, special attention will be paid on design criteria for selection of proposal. Additionally, UNDP will engage mentorship/coaching team to identify and eliminate weaknesses during acceleration and implementation period.	team Beneficiary			
8.	Lack of specific legislation on bio-waste		Procedural	P = 3 I = 5	MoEP representatives will be involved in the development of criteria for selection as well as in the evaluation of project applications, so any legislative issue will be identified in early stage enabling adequate formulation of criteria and evaluation of submitted applications.	team			
	Potential changes in the Law on Waste Management and/or other relevant legislation		Procedural	P = 3 I = 5	UNDP staff will take a pro-active role and will certainly draw attention to the donors and beneficiaries whenever we perceive a risk of changes in laws affecting the course of the Project.				
10.	Inadequate and/or non- capacitated human resources within the core project team to successfully implement the project by adaptive management and support the mainstreaming of its results		Operational	P = 3 I = 5	Recruitment of the key project staff based on competitive selection procedures emphasizing the qualifications and requirements set up in the ToR. Effective planning and day-to-day monitoring of the progress towards the set targets to complement the regular annual monitoring, including the use of international expert support to the backstop and build up the local capacity for adaptive management and mainstreaming the project results when and as needed. Furthermore, this risk is foreseen to be mitigated by teaming up with a senior expert entity having experience of designing and running challenge programs as well as by benefiting from the resources of the coaching team to be established under Component 2 of the project.	team			

## 4. Steering committee Terms of Reference and TORs of key management positions

## Steering committee Duties and responsibilities:

The Steering committee (SC) is the main body to supervise the project implementation in accordance with UNDP rules and regulations and referring to the specific objectives and the outcomes of the project with their agreed performance indicators.

The main functions of the Committee are:

- General monitoring of project progress in meeting its objectives and outcomes and ensuring that they continue to be in line with national development objectives;
- To provide strategic leadership and serve as a coordination mechanism for various partners involved;
- Facilitating co-operation between the different Government entities, whose inputs are required for successful implementation of the project, ensuring access to required information and resolving eventual conflict situations faced during project implementation when trying to meet its outcomes and stated targets;
- Supporting the elaboration, processing and adoption of the required institutional, legal and regulatory changes to support the project objectives and overcoming of related barriers;
- \* Facilitating and supporting other measures to mitigate the identified risks to project success;
- Approving annual work plans and progress reports, the first plan being prepared at the outset of project implementation;
- Approving project management arrangements; and
- Approving any amendments to be made in the project strategy that may arise due to changing circumstances, after careful analysis and discussion of the ways to solve problems.

Steering committee structure and reimbursement of costs:

Beside the representative of the Ministry of Environmental Protection, the Steering committee is expected to include representatives from the Sida and UNDP. The final list of the SC members will be completed at the outset of project operations and presented in the Inception Report. New members into the SC or participants into the Committee meetings during the project implementation can be invited at the decision of the Committee, by ensuring, however, that the Committee will remain sufficiently lean to facilitate its effective operation.

The costs of the Committee's work shall be considered as the Government's or other project partners' voluntary in-kind contribution to the project and shall not be paid separately by the project. They are also not eligible to receive any monetary compensation from their work as experts or advisers to the project.

#### Meetings:

It is suggested that the Committee will have regular meetings, twice a year, or more often if required. A tentative schedule of the Committee meetings will be agreed as a part of the annual work plans, and all representatives of the Committee should be notified again in writing 14 days prior to the agreed date of the meeting. The meeting will be organized provided that the executing agency, UNDP and at least 2/3 of the other members of the Committee can confirm their attendance. The project manager shall distribute all materials associated with the meeting agenda at least 5 working days in prior to the meeting.

#### Project Implementation Unit

#### Main tasks and responsibilities:

The PIU will be in charge for managing the overall project implementation, developing and managing the challenge program and supporting the project implementation otherwise. Within this overall framework, the specific tasks of the PIU shall include, among others:

 General coordination, management and supervision of project implementation in compliance with the provisions of the project document and the UNDP and national rules and procedures;

- Developing and publishing Challenge based call for proposal of business solutions and innovative projects for creative ways to reduce, reuse and recycle bio-waste fraction of biodegradable waste in the Republic of Serbia aiming to reduce disposal on landfill and mitigate climate change;
- Identifying and actively initiating and establishing partnerships with other national and international initiatives and organisations working in the project related fields to enable capacity building and coaching of the key local stakeholders;
- \* Managing the Acceleration process for selected project proposals;
- Managing the implementation of the project proposals selected for co-financing;
- Capacity building and provision of other required direct support to enable smooth implementation of the Project;
- Public outreach, awareness raising and education on bio- waste management and related topics and for facilitating the establishment of public-private partnerships to encourage investment in biowaste management; and
- Initiation and drafting of required complementary legal and regulatory acts to enable effective adoption and implementation of Climate Smart -Bio Waste Management Challenge

#### Expected results and related milestones

For the duration of the Project, the expected results and related milestones of the PIU will be consistent with those of the Project Results Framework. Further targets, as applicable, for the post-project period will be defined in consultation with Sida and Ministry in charge for waste management in Serbia during project implementation.

#### Management and staffing:

For the duration of the Project, the core team of the PIU will consist of:

- Climate Change Portfolio Manager (Project manager) in charge for the overall project implementation in compliance with the project document and the UNDP and the national rules and procedures. He/she won't work full time for the project, but will share his/her time with other UNDP climate change projects in his/her portfolio; and
- \* Project assistant providing administrative and logistic support to project implementation.

After the required initial effort to implement selected proposals, the Government is expected to facilitate their replication also after the end of the Project. This further support and staffing needs and possible continuation of the PIU operations will be assessed during project implementation and is to be addressed in the project's exit strategy. More detailed job descriptions and expected qualifications of the staff of the PIU are presented below.

#### Project Manager (Climate Change Portfolio Manager)

#### Duties and responsibilities:

Overall project coordination and implementation, consolidation of work plans and project documentation, preparation of quarterly progress reports, reporting to the project supervisory bodies, coordinating work of the PIU and supervising the work of the project experts and project staff and operational project management in accordance with the Project Document and the UNDP guidelines and procedures for National Implementation Modality (NIM) with UNDP support, including:

- Supervision of the overall project implementation on both organizational and substantive matters– ensuring that budgeting, planning and general monitoring of the project are done in accordance with the Project Document and the rules and procedures established in the UNDP Programming Manual;
- In co-operation with the Lead mentor for Mentorship/Coaching team, preparation of annual work plans and budgets with close monitoring of the overall project progress and conducting required adaptive management to reflect the changing circumstances and eventually emerging new opportunities;
- Managing the procurement and the project budget under the supervision of UNDP to assure timely involvement of local and international experts, organisation of workshops and public outreach etc. in accordance with UNDP rules and procedures;
- Submission of annual Project Implementation Reviews and other required progress reports (such as QPRs) to the Steering committee and the UNDP in accordance with the section "Monitoring and

Evaluation" of the Project Document (with a close linkage to required adaptive management actions);

- \* Supervising and coordinating the contracts of the experts working for the project;
- As applicable, communicating with project's international partners and other donors and financing entities active in Serbia for leveraging additional financing for meeting the project objective and cofinancing targets;
- Actively exploring opportunities for new partnerships and opportunities for co-ordination and cooperation with other waste management related ongoing and planned activities in Serbia and abroad; and
- Ensuring otherwise successful completion of the project in accordance with the stated outcomes and performance indicators summarized in the project's results framework and within the planned schedule and budget.

## Expected Qualifications:

- Advanced university degree and at least 10 years of professional experience in the specific areas the project is dealing with;
- Advanced knowledge and record of experience in dealing with the environmental protection/ climate change mitigation and adaptation portfolio of projects;
- Advanced knowledge of the international and EU climate change related policies and practice, UNFCCC requirements, Serbia's climate change policy, legal framework and practice;
- Experience in managing projects of similar complexity and nature, including demonstrated capacity to manage people and actively explore new, innovative implementation and financing mechanisms to achieve the project objective;
- Experience in working in Serbian public sector;
- Demonstrated experience and success in the engagement of and working with the private sector and NGOs, creating partnerships and leveraging financing for activities of common interest;
- Good analytical and problem-solving skills and the related ability for adaptive management with prompt action on the conclusion and recommendations coming out from the project's regular monitoring and self-assessment activities as well as from periodic external evaluations;
- Ability and demonstrated success to work in a team, to effectively organise it, and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes;
- \* Good communication skills and competence in handling project's external relations at all levels; and
- Fluent/good knowledge of Serbian and English languages.
- Familiarity and prior experience with the UNDP requirements and procedures is a strong asset.

# Project Assistant

#### Duties and responsibilities

Supporting the Project manager in the implementation of the project, including:

- Responsibility for logistics and administrative support of project implementation, including administrative management of the project budget, required procurement support, etc.
- Controlling project expenditures and maintaining up to date business and financial documentation, in accordance with UNDP and other project reporting requirements;
- Organizing meetings, business correspondence and other communications with the project partners;
- Provide logistical support to the project team and consultants working for the project in organising duty travel, meetings, seminars, workshops, informative sessions etc;
- Ensuring effective dissemination of, and access to, information on project activities and results and supporting the project outreach and PR activities in general, including keeping the project web-site up to date in co-operation with the IT and communication consultant;
- Managing the projects files and supporting the project teams in preparing the required financial and other reports required for monitoring and supervision of the project progress; and
- Supporting the project teams in managing contracts, in organizing correspondence and in ensuring effective implementation of the project otherwise.

Expected Qualifications:

- University degree in economy, engineering or in other specific areas the project is dealing with and/or required for the position under consideration and at least 5 years of related professional experience;
- Familiarity with international and EU climate change related policies and practice, UNFCCC requirements, Serbia's climate change policy, legal framework and practice;
- Fluent/good knowledge of the Serbian and English languages;
- Demonstrated experience and success of work in a similar position;
- Good administration and interpersonal skills;
- Ability to work effectively under pressure;
- Good computer skills;
- Familiarity and prior experience with UNDP requirements and procedures, as well as environmental protection/climate change portfolio of projects are considered as an asset

For the successful implementation of the Project, qualified experts' team and clear division of tasks are essential. Therefore, UNDP will engage the following experts:

#### Lead mentor for Mentorship/Coaching team

Lead mentor for Mentorship/Coaching tea (Individual Contract (IC), part time) will take the lead on the acceleration process and implementation of the selected projects. He/she will provide business development mentorship for teams included in the Accelerator process and support up to 5 teams which will be selected for co-financing.

#### Related duties and responsibilities:

# Task 1 – Develop a tailor-made programme for teams participating in Accelerator to reach maturity and be ready for implementation

- Assessment of needs and further steps necessary to be implemented by each of selected teams based on which tailor-made programme will be made;
- Produce market analysis based on specific needs of each project proposal and its team, including analysis of potential competitors, partners and/or end-users for each team;
- Assess market possibilities on multiple levels: local, national and potential international exposure;
- Provide financial consulting service to already developed financial plans;
- Assist in assessing potential risks, issues and implications of investment to the project teams and potential investors and project partners in order to better prepare teams for market exposure;
- Plan and organise meetings with project partners while analysing their previous investments and business opportunities;
- Assist in building a network of people through participation in business events, conferences and meetings (PR and media consulting) as well as provide guidance to teams in preparing their marketing solutions to successfully promote project ideas.

#### Task 2 – Organize and communicate with teams and other project consultants

#### Communicate with teams in the group:

- Exchange information related to team's progress with other project consultants to make the Accelerator teams successful;
- Identify consultants with specific domain knowledge relevant to projects;
- Identify team's needs for general capacity building programmes on entrepreneurship, business planning, market research, financial accounting, marketing/PR and provide support in delivering trainings.

#### Task 3 – Track and report progress in Accelerator process

- Produce Progress Report (up to 10 pages) on activities implemented by each project team, including updates on reaching the milestones.
- Provide support to the Evaluation committee in the process of final selection of the project ideas;
- Participate in Inception seminar to present relevant topics related to bio waste management

- Support acceleration of ideas, mentorship support, transfer of knowledge and expertise, prototype development and testing, identification of potential markets for innovative projects and businesses, mapping of partners and funding sources.
- Provide support to the Communication expert in preparation of material for dissemination to the stakeholders, information needed for web-based sharing platforms and other supporting materials and actions to raise awareness;

#### Task 4 – Track and report progress of implementation of up to 5 selected project proposal

- Support to successful applicants upon signature of the PBP agreement and during implementation of selected project proposals;
- Conducting monitoring visits to monitor the project progress and discuss and clarify the related issues on the ground and drafting monitoring reports;
- Organization of periodic meeting with all stakeholders aiming to identify weakness and to discuss problems and mitigation measures related to Project implementation;
- To develop recommendations including description of necessary actions to mitigate the problems, institution responsible for the action and time for the action;
- Contributing to the preparation of project progress reports with related adaptive management planning and to preparation of Final report, particularly related to "lessons learned" section and recommendations for future work.
- Participation in the Final seminar to disseminate information on the project results and replicate the successes and present findings to the relevant stakeholders, with particular reference to the conclusions;

#### **Expected Qualifications:**

- University degree in environmental science and management, chemistry, or related fields; Advanced degree is desirable
- \* At least 10 years of professional experience in environmental protection related fields;
- \* Demonstrated experience in management of projects through stages of implementation
- Demonstrated experience in the engagement of and working with the private sector;
- Excellent presentation skills, demonstrated ability to facilitate info days;
- Excellent organizational and time management skills
- Ability and demonstrated success to work in a team, to effectively organize it works and to motivate its members and other project counterparts to effectively work towards the project's objective and expected outcomes; and
- Fluent in Serbian and English languages.

Accurate profiles and number of Members of the Team of evaluators and the Mentorship/Coaching team will depend on the type of submitted, pre-selected and applications selected for Acceleration process. Also, based on topics that will be subject of activity 3.3, profiles of the members of the Team for supporting further policy implementation and project development on improved bio-waste management will be defined. In summary, implementation of the activities under this Project will require the mobilisation of experts with the competences in the following fields (not obligatory and not necessarily limited to):

- Independent experts (tentatively 1 to 3 experts will be responsible for technical evaluation and pre-selection of submitted applications and at least two per each pre-selected application/project proposal will be responsible for detailed evaluation of qualified pre-selected applications and to prepare final evaluation report related to selection of applications for co-financing).
- \*
- Waste management expert;
- Public Awareness Expert;
- Legal expert;
- Financial expert;
- Energy efficiency;
- Climate change expert;
- Circular economy expert.

Each expert has to fulfil the following minimum requirements:

- a level of education which corresponds to completed university studies of at least four years in the field for which the expert is mobilised;
- working knowledge of English language;
- minimum 5 years (junior experts) or 7 years (senior experts) of working experience in the field for which the expert is mobilised.

The selection procedures used by the UNDP to select these other experts will be transparent, and must be based on pre-defined criteria, including professional qualifications, language skills and work experience. The selected experts will be subject to approval by the Project manager before the start of their implementation of tasks.

# 5. Stakeholder Involvement Plan

Stakeholder	Envisaged role and potential areas for co-operation during project implementation					
Central government administration and related organisations and companies						
Ministry for Environmental Protection (MOEP)	The main project partner and Government counterpart responsible for environmental protection and climate change related issues including waste management policy, strategic and legal framework as well as measures affecting this sector.					
Serbian Environmental Protection Agency (SEPA)	A legal entity within the MoEP, SEPA is the body responsible for management and update of information on waste management, management of the data on waste amounts as well as reporting on waste management in accordance with international obligations. SEPA collects data on waste from operators who deliver data to the National Register of Polluting Sources via dedicated web portal. SEPA uses this data to produce different yearly reports on waste in the Republic of Serbia: Waste Management, Report on the management of packaging and packaging waste, Report on products that after use become special waste streams, Report on plastic waste, etc.					
	Therefore, data relevant for the Project will be discussed and obtain from the SEPA, as appropriate.					
,	ration and related organisations					
Local municipal administrations	Key project counterparts at the municipal level, including local waste management departments and entities dealing with other municipal services. The local self-government has the obligation of analysing the amount and composition of municipal waste in its territory four times per year. Therefore, they possess the information on waste generators including food industry, restaurants, caterers and retail premises.					
	In accordance with the Law of waste management, local self-government unit shall ensure and provide equipment for centres for the collection of household waste which cannot be disposed in municipal waste containers (bulk waste, biodegradable waste, etc.), including hazardous household waste, in accordance with local waste management plan.					
	Therefore, particular attention should be given to the LSGs being beneficiaries of the Challenge based call for proposals, to verify if the activities related to bio-waste are also integrated in their Local waste management plans.					
Standing Conference of Towns and Municipalities	Advocating for the interests of Serbian municipalities it represents one of the key project partners that supports the introduction and implementation of project related activities at the municipal level. It will support related outreach, networking, co-ordination and public awareness activities through its working committees. The particular role of SCTM will be to disseminate information on the Challenge call as well as to support further replication of the selected solutions.					
Environment related profe	ssional associations					
Chamber of Commerce	Envisaged key project partner for engaging the private sector. Specialized unit for environment and climate change secures active involvement of Serbia's private sector in creation and implementation of climate related policies and projects.					
	Cooperation with the Chamber of Commerce will be focused on further dissemination of project related activities and results among interested companies in Serbia and for the promotion of partnerships with foreign companies in order to ensure transfer of knowledge and best available technologies. Also, this partnership will further nurture introduction of circular economy concept in Serbian decision making and commercial sector. This process will be backed up by concrete examples from practice sourced through the Innovation Challenge calls.					
Universities and other scie	ntific, research and educational entities					
Local universities and other research and educational	Their role will be to apply scientific research and knowledge to support further elaboration and implementation of the project proposals selected					

entities	under Challenge based call for proposals. Universities and other scientific,
ennues	research and educational entities will be testing innovative solutions for recycling bio-waste and developing emerging technologies, in order to bring them to the market.
Public utility companies in Centres	the waste management field and Regional Waste Management
Local public utility	PUCs are founded by local self-governments for providing various types of
companies on waste	services. PUCs of interest to this Project are the following:
management and other public utility services and	<ul> <li>PUCs specialized for solid waste collection and treatment that are usually established in larger local self-governments.</li> </ul>
Regional Waste	<ul> <li>PUCs specialized for maintenance of public green spaces.</li> </ul>
Management Companies	Consideration should be given to PUCs being end beneficiaries of the Challenge based call for proposals.
	Established Regional PUCs responsible for waste management in the regions (landfilling, collection, transport, separation etc) also could be considered to be end beneficiaries in case where Regional Waste Management Plan exists.
Private companies licence	d for activities in the biodegradable waste management field+
Private companies that possess permit for biodegradable waste treatment	According to the Serbian Environmental Protection Agency data, around 61 private companies are registered for treatment of biodegradable waste.
	These companies could be beneficiaries of the Challenge based call for proposals.
Biodegradable Waste gene	
	The Food industry, restaurants, caterers and retail premises who can propose innovative projects in bio-waste management sector should be particularly taken into consideration as potential beneficiaries of the Challenge based call for proposals.
International organisations	and financing entities
EU / IPA	Co-operating opportunities in the legal and regulatory framework development. Also, synergies are possible with the other EU financed environmental infrastructure projects related to waste management, in particular "Communication and visibility activities for source separation schemes in 4 regions project.
GIZ	Possible coordination and co-operation opportunities with ongoing "Towards Better Management of Food Waste in the Republic of Serbia" project in particular regarding the development of legislation initiation of a comprehensive awareness-raising campaign for public and private entities on responsible food waste management.
	There are several opportunities for cooperation with the programme on "Development of a Sustainable Bioenergy Market in Serbia", in particular on activities related to promotion and sustainable use of bioenergy and development of local sustainable biomass supply schemes.
Swedish International Development Agency (Sida)	Swedish Government has a long experience in sustainable waste management, including bio-waste, and a broad scale of activities and projects conducted in Serbia in cooperation with the Serbian Government. This project will aim at interlinking activities with other development projects financed by Sweden, but also seek to develop broader cooperation with the involvement of Swedish expertise, including promotion related activities and business development within the bio-degradable waste sector.
	Possible coordination and co-operation opportunities in the domain of waste management infrastructure and compliance with the EU climate and environment related acquis.
	Co-ordination with other ongoing project financed by Sida such as the ongoing "Further Implementation of the Industrial Emission Directive in Serbia" "Environmental infrastructure support programme" as well as
	"Source Separation Project in Four Regions in Serbia",.

"Climate Smart Development Challenge" and "Reducing Barriers to
Accelerate the Development of Biomass Markets in Serbia", "Circular
Economy for Sustainable Development in Serbia". UNDP will maintain day
to day activities of the project, ensure monitoring and evaluation of project
activities and the achieved results.